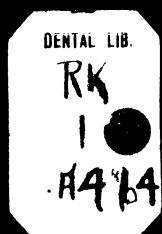
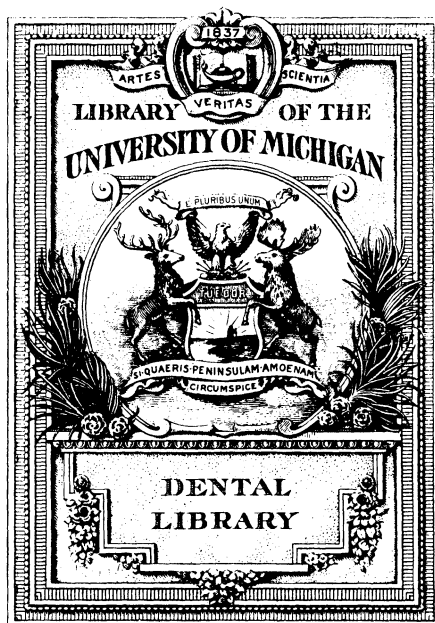


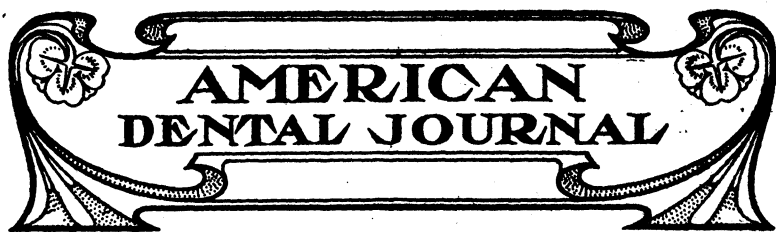
AMERICAN
DENTAL
JOURNAL

5

1906







PUBLISHED ON THE FIRST OF EVERY MONTH

VOL. 5.

JUNE, 1906.

No. 6

TABLE OF CONTENTS.

Progressive Course of Practical Instruction

Orthodontia,

By J. N. McDOWELL, D. D. S. - - - - - 297

Prosthetic Dentistry,

By B. J. CIGRAND, B. S., M. S., D. D. S. - - - 302

Dental Therapeutics,

By GEORGE W. COOK, B. S., D. D. S. - - - - 307

Operative Dentistry,

By R. B. TULLER, D. D. S. - - - - - 311

Original Contributions

Toothsome Topics,

By R. B. TULLER, D. D. S. - - - - - 317

Words and Deeds that Last Forever,

By B. J. CIGRAND, B. S., M. S., D. D. S. - - - 321

Notices of Meetings

Abstracts and Selections - - - - - 335

Editorial - - - - - 332

Miscellaneous - - - - - 351

Personal and General - - - - - 355

Want Ads - - - - - 360

Index to Advertisers - - - - - 361

Awarded
GOLD MEDAL

Universal Exposition
Saint Louis
1904

LISTERINE

The best antiseptic for a dentist's prescription



THE mild, stimulating effect of the free boric acid radicle in Listerine is of the highest importance in maintaining a healthy equilibrium of the fluids of the oral cavity. At best, alkalies simply temporarily neutralize the acid-forming ferments which the carbohydrates of food produce in the mouth, whilst a true antiseptic prevents that fermentative change.

Literature will be forwarded upon request, containing a brief résumé of recent bacteriological investigations supporting the above argument and embodying:

"Experimental Researches."—A report by members of the Association of Analytical Chemists of the Pasteur Institute, Paris, concerning the antiseptic action of Listerine.

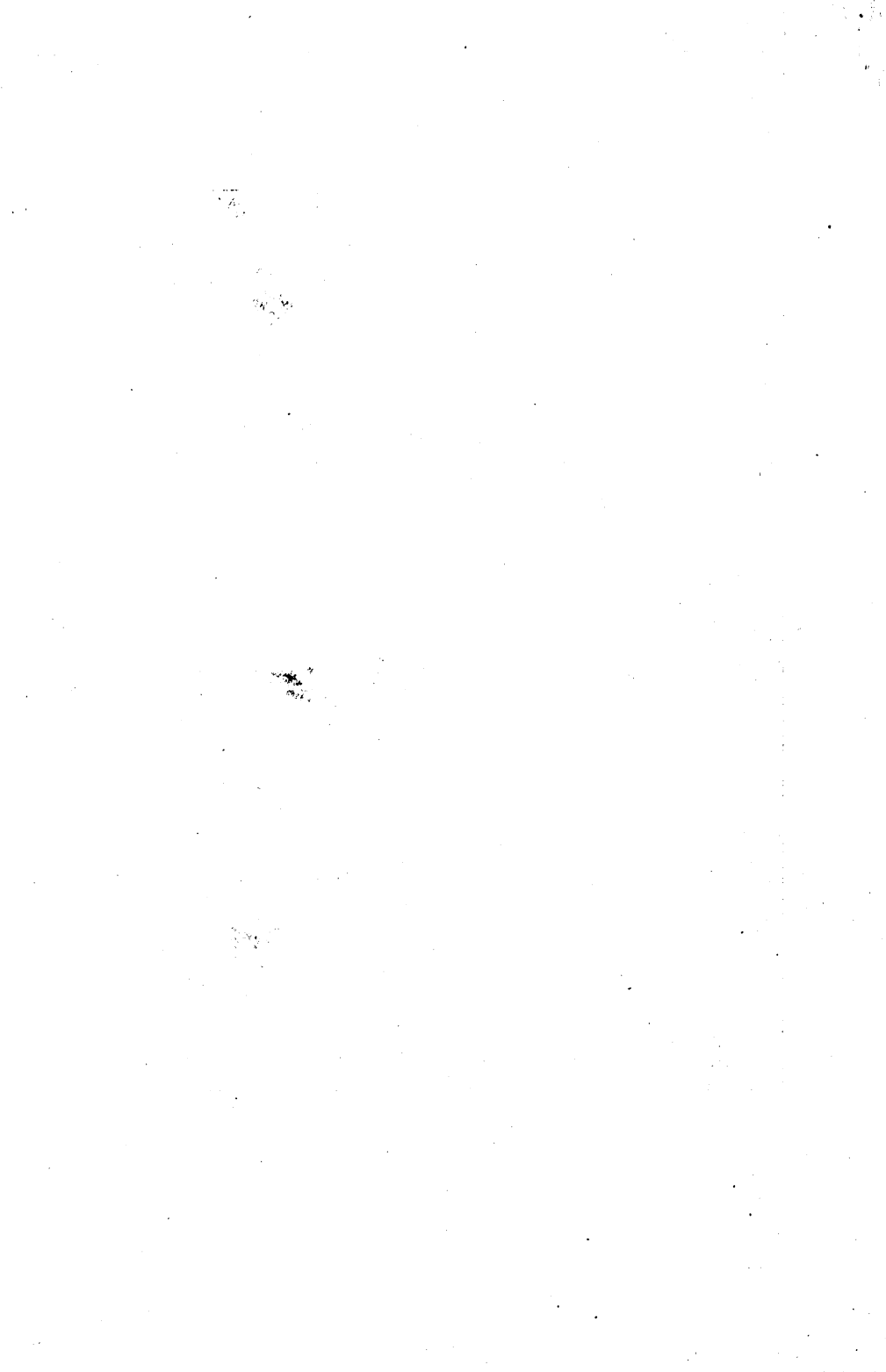
"Listerine Under the Microscope."—A tabulated exhibit of the action of Listerine upon inert laboratory compounds.

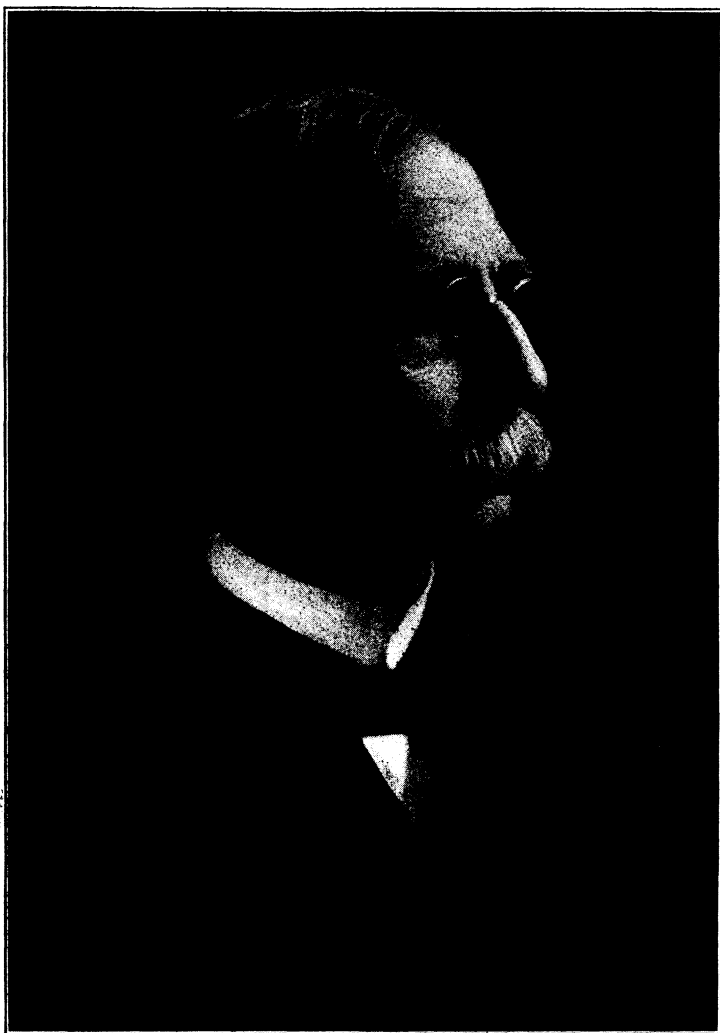
"Comparative Value of Certain Antiseptics."—An interesting showing of the comparative value and availability of various antiseptics in the treatment of diseases of the oral cavity.

Lambert Pharmacal Company

St. Louis, U. S. A.

By mentioning the AMERICAN DENTAL JOURNAL when writing to Advertisers you will confer a favor upon both the Advertiser and the Journal.





DR. L. P. HASKELL.

Dr. Haskell has been in the practice of dentistry for sixty-two years, and was banqueted on his eightieth birthday, May 15, by the Odontographic Society of Chicago.

PROGRESSIVE COURSE OF PRACTICAL INSTRUCTION

ORTHODONTIA.

BY J. N. M'DOWELL, D. D. S.,

PROFESSOR OF ORTHODONTIA, COLLEGE OF DENTISTRY, UNIVERSITY OF
ILLINOIS.

CHAPTER XVII.

ELONGATING TEETH.

In a case like Fig. 1, when the teeth are very large and malocclusion is confined to the anterior part only, to move all the normal alignment would be to elongate the facial appearance by bulging the lips out, something the patient and public would notice at once and call a failure. In extracting teeth for such cases certain things must be observed. (1) The teeth must be extracted to favor the median



Fig. 1.

line of the teeth; (2) to extract the one that will favor the movement of the others without tipping them; (3) extract so that the distal occlusion will be impaired as little as possible; extract to improve the occlusion; extract to improve the facial appearance. In Fig. 1 the left lower central was extracted, which favored the movement of the left lower lateral forward without tipping sideways. In the upper

to favor the outward movement of the left lateral and the backward movement of the left central, and at the same time to harmonize the median line with the lower, the upper first left bicuspid was extracted. In the lower arch after the left lower lateral was extracted, the wire

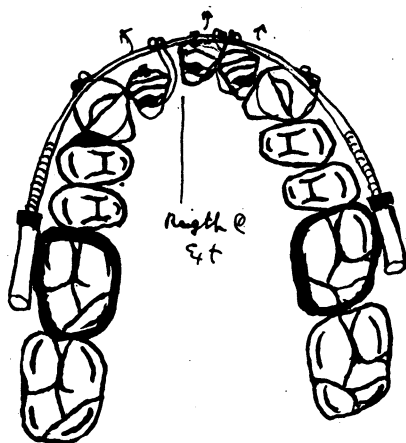


Fig. 2.

arch was put on, and the three incisors were moved and rotated forward by ligating to the arch. (Fig. 2) The cuspids were banded and notches cut to support the arch in position until the teeth were

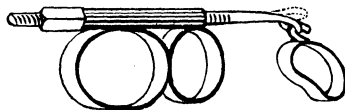


Fig. 3.

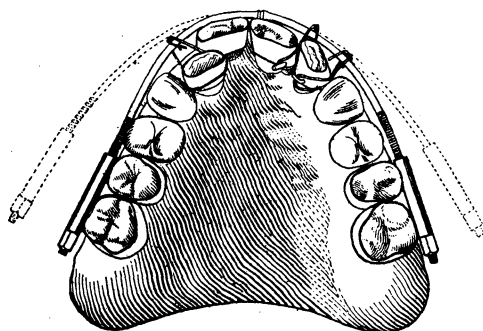


Fig. 4.

moved out against the arch. In the upper, as the cuspid must be moved backward on one side, it is best to use the traction screw alone at first until drawn back to keep from changing the occlusion of the distal teeth. It is best to band the second molar, if there is one, the first molar and the second bicuspid. Solder these bands together; solder the tubing for the traction screw on the first molar and bicuspid band, use the traction screw as in Fig. 3. After the cuspid is drawn back put on the wire arch with the nuts distal to the tubing on the anchor teeth, move the lateral out to labial occlusion and rotate the left central backward to alignment by banding, and have the spur on the lingual surface and rotate with wire ligatures as in Fig 4. Use no lateral spring pressure.

In a case like B, Fig. 5, if all of the teeth were moved forward into normal occlusion, the lips would not only bulge out, but the teeth themselves would project forward. In preference to marring the features it is best to sacrifice one or two teeth, as was done in this case. While



Fig. 5.

the preference is always to restore to normal, it is often necessary to extract for the sake of the facial appearance as is shown in A and B, Fig. 5, the first bicuspid being extracted on each side, both upper and lower. In this case nothing was done to the upper or lower centrals or laterals. In the upper the cuspids were drawn back with the

traction screws. In the lower the space for the second bicuspid on both sides was almost closed up, the second bicuspid was wedged in and could not erupt. The first bicuspid was extracted, the anterior teeth were held in position by the use of the wire arch, until the second bicuspid erupted sufficiently to hold the proper space for themselves. The bicuspid was aided in erupting by putting on narrow bands, which passed down under the gum, hooks were soldered to the bands and weak rubber ligatures passed from the arch to the

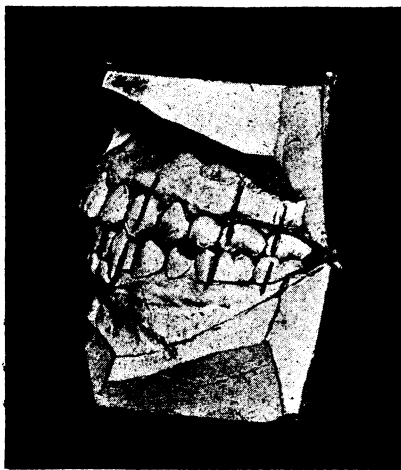


Fig. 6.

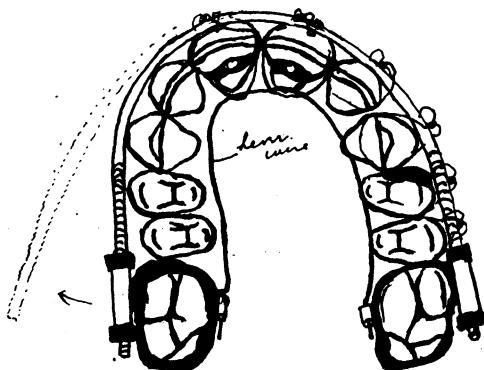


Fig. 7.

hooks to aid eruption. One can readily see that to change the arch sufficiently to accommodate all of the teeth, the result would only be a facial distortment.

One of the peculiar cases that we meet with occasionally is where the teeth of the upper arch or of the lower arch may be in lingual occlusion, but on moving the teeth outward or inward, as the case may be, they will be moved directly into normal occlusion. In Fig. 6 the right upper half is in lingual occlusion. It can be seen that on the lateral expansion of the teeth they will move into normal occlusion. The treatment is to move one tooth out at a time with the wire arch on the malocclusioned side. (Fig. 7.) If an attempt is made to all out on the malocclusioned side at once, the side in normal occlusion will also be moved out beyond the normal. It is best to use all the teeth in the opposite side for anchorage and move only one tooth out at a time on the malocclusioned side by the spring pressure of the arch, and retain with a vulcanite plate until the sloping planes of the teeth are firmly locked in normal occlusion.

(To be continued.)

MAKING OVER A GOLD FILLING INTO AN INLAY.

Very often there are cases presented where a large contour filling in an incisor falls out either from decay at the margins or from a faulty cavity preparation. In the former case I remove decay and reshape cavity, avoiding the margins except where decay has encroached. Burnish thin platinum 1-1000 to cavity and press filling to place. Any extensions of the cavity may be filled loosely with sponge or crystal gold, holding filling in place with a wedge. Remove all carefully by attaching a little bit of wax to a small spatula, warming same, and pressing against filling so that matrix filling and any extensions of gold may be held together. Paint cavity side of matrix with chalk and invest in tenax and plaster warm, remove wax, and flow on a little 22k solder at necessary points to unite filling to matrix, etc., or contour if necessary. Drop inlay and investment while very hot into water which will separate them promptly. Dip in nitric acid and then in soda solution. Cement to place and finish with stones, disks, etc. Does not take half the time of a gold filling and makes a better operation in a frail tooth.—*Exchange*.

PROSTHETIC DENTISTRY.

BY B. J. CIGRAND, B. S., M. S., D. D. S., CHICAGO, ILL.

CHAPTER XXXVI.

The human face has been the theme for ages; it has lent inspiration to both brush and pen for countless generations; and it was an element in the very origin of our language. The Egyptian obelisks attest the early and primitive handiwork of the chisel in its attempt to portray and preserve the human face. The earnest labors of the Phœnician ceramic artists eagerly sought to emboss it on the exquisite vase work, and the Grecian maids in painstaking manner hoped to preserve it in their tapestry, while the Romans patiently wove it into costly cloths. But whether found on Egyptian granite, or on Etruscan metal, it never truly stood as the mirror of the soul—when blazoned by ancient hands.

Much as archæologists sing the praise of the talents of the ancient dead and much as recent discoveries proclaim the old story of lost arts, we of this day and age live in a gloriously more artistic era of the earth's career.

The artists of old did nobly considering their knowledge and opportunities, but their labors to reproduce the human face were abortive—the result was crude. How was it possible, with their meager ken of anatomy and physiology, and positive ignorance of their accompaniment to accurately carve or reproduce the certainties of muscle, fiber and filament. In my travels through the art galleries of Europe I carefully noted the great and striking difference between sculptur and art antedating psychological and anatomical knowledge, and I am lenient indeed when I say that the worship of ancient sculpture as it pertains to the human face does not appeal to me.

The argument is advanced that time has wrought the change; there may be truth in this, but time has not caused their lips to grow nor teeth to change position; nor has Father Time in his destructive moods caused eyes to be pushed out of position—and yet all Egyptian, Serian and Phœnician diagrams in portraying a profile of the human face the eye is indicated direct front view.

The human face, in its true proportions, does not exist on cloth

nor stone until the Alexandrian age. Subsequent to this epoch the Greeks and finally the Romans occupied their time in its more exact blazonry, while it has been the modern sculptors' triumph to catch the life and soul of the face and enshrine it in lifelike marble. But only within the last fifty years has there been any noticeable effort to delineate in any measure of accuracy the symbols of character, upon which we as modern scientists perform our services.

The remote past had the knowledge of form and outline, the mediæval added life, but the modern brush and chisel contributed the soul.

If there are any people who have not visited the fine arts and liberal science buildings and observed there the dreamland of art they have an opportunity that must not be lost. The marvelous advance of the craft which cuts the stone is beyond brief analysis. The present age asks for realism and minutia; and the artists and sculptors are not disappointing an expectant laity.

In this forward and progressive trend there is indeed a lesson for those of us who hope to preserve and restore the face, not for periods of years, nor epochs of time, simply during the time that life lasts. We must catch the inspiration of this magnificent display of art and return to our professional studios and follow in the footsteps of these masters of dexterity.

Some might ask what can kindred callings teach us? Of what avail is a knowledge of fine art and wherein can the artist or sculptor lead the way?

There is an adage that has been handed down to us which says "He who knows not other languages knows not his own." The truth of this is equally applicable to the trades and professions, and the practitioners of our calling are emphasizing the necessity of studying professions which in basic purposes are correlated to dentistry. The study of fine art, sculpture and psychology are among the latest recommendations to the student curriculum, and practitioners will do well to observe the benefits which are derived from possessing a knowledge of these kindred vocations.

It is difficult to determine the exact facial outline which would comply with the various schools of art or be in harmony with the ideas of the famous sculptors. In fact the general outline of the face is different according to the nativity and training of the artist, and this is especially true regarding those living in different periods

of civilization. The Egyptians idealized the retreating forehead, the Grecians admired the long straight nose, the Romans thought the beak nose more beautiful; the Saxons gloried in a massive lower jaw, while the French paid tribute to the beauties of the lip. In fact all nations and people have rendered special consideration to some feature of the face and the elements of personal beauty were largely dependent on geographical location and even climatic influences.

What the world pronounced as a perfect or beautiful face two centuries ago would be declared primitive today, and yet the sculptors and artists have finally come to understand the basic equations of the divine law of correspondence.

The underlying law of harmony and correspondence has superseded all dogmatic rules as enunciated by the masters of a century ago. The artists of today recognize the admirable disposition of the Grecian nose. The strong element of the massive jaw; the firm disposition of the Roman nose and the loveliness and goodness of eyes and lips, but they must be coupled and be in harmony with corresponding features, and in this dependence there exists the intricate and fascinating study of facial art.

Anatomists and physiologists differ widely as to the definition of the face. There are those who include the forehead as a part of the face, and there are others who claim that the face begins at the superciliary ridges and embraces the eyes, nose, cheeks, mouth and chin. I prefer the former definition, which holds that the forehead is included in the face. Dividing the face into three equal parts, we have in the lower third the lips, mouth, chin and greater portion of the cheeks and inferior maxilla.

That there is a distinct relationship between the mouth and the frontal region there can be little question. This was recognized years ago, but direct reference to it is found in Tuckerman's Washington's character as exemplified in his portraits. The lines read: "The usual objection of the Stuart Washington is a certain fullness about the mouth which does not correspond with the distinct lines of the frontal region."

Artists and scientists for upward of a century have recognized the opening of the ear as a point best calculated to estimate all developmental stages. In profile this is the essential point. The polarity of the ear was recognized, too, by such eminent scientists as Dr. Gall and Combe.

The early artists subdivided the face into three parts in such a manner that the first third embraced the forehead, the second third included eyes and nose, while the third contained the mouth and chin.

Artists and observers long since recognized that in the infant the ear seemed to change its location, but this was apparent and not real. The youths portray this facial development. Nelson Sizer, in commenting on this, says: "It will be noticed that the infant head increases relatively more forward and upward than backward, being larger in the middle and back region proportionally than it is in the front and hence a mother is apt to think her babe has such a little, contracted, sloping head she is fearful of its mental inferiority. But as the child's mental activity comes into play the anterior and superior portions of the brain are gradually developed."

Prior to the days of Dr. Gall and Spurzheim, those who studied the human countenance and facial expressions seemed to have no idea that the brain had the slightest relation to intellectual manifestations. They were aware that if a heavy blow was given upon the head insensibility and even paralysis or death might result, but they did not regard the brain as the seat of mentality. They believed, as many do even this day and age, that all emotions, passions, sentiments, affections were attributes of the soul, while our varied tastes and energy sprang from the heart.

Scientists and artists today know that the face is the mirror of the brain and that its varied expressions, sudden changes and general outlines are subject to the gorgeous nerve ganglia of the cranium. Hence the psychologists, physiologists, anatomists and sculptors are gradually growing closer as investigators and delineators. All must have co-related curricula in order to best prosecute their respective labors.

John W. Vanderpoel, one of Chicago's well known facial artists, writes: "No matter how intimate your knowledge of a part may be, it is only of value when it co-exists with an appreciation of its relation to the entire structure." In his excellent article on "The Construction of the Human Face," which appears in the July issue of the *Sketch-Book* of 1903, there are many ideas which can be of service to the dentist. Of all the descriptions relative to the harmonious proportions of the mouth this sketch seems by far the most natural. I have the honor of possessing the original drawing and you will doubtless agree that his delineation of the normal pose of the mouth

is essentially natural. Among other things he makes this observation: "The mouth, like the eye, is capable of great movement, and in unison with it forms the means of infinite variety of expression which plays in quick succession over the human countenance. Because of this mobility of expression and the softness in texture of the lips, care should be taken not to detach the parts one from the other beyond accentuating their separation at the middle and corners."

This same point is beautifully emphasized by our own Dr. Oliver Wendell Holmes, who for years lectured before the dental students of Harvard University, and as to the mouth he made this statement:

"All parts of the face doubtless have their fixed relations to each other and to the character of the person to whom the face belongs, but there is one feature which more than any other facial sign reveals the nature of the individual. This feature is the mouth, and the portion of it referred to is the corner. A circle of half an inch radius, having its center at the junction of the two lips, will include the chief focus of expression."

The Oriental people have a proverb which reads: "Show me a man's eyes and I will show you what he might have been and show me his mouth and I will tell you what he is." Artists have recognized long since that perfection in portraying lies in having the mouth accurately outlined and shaded, the slightest deviation from the original will magnify itself on the canvas. They realize that the index of individuality is more pronounced in the lips than in another attribute to the face.

(To be continued.)

DENTAL THERAPEUTICS.

BY GEO. W. COOK, B. S., D. D. S., CHICAGO, ILL.

PROFESSOR OF BACTERIOLOGY AND PATHOLOGY, UNIVERSITY OF ILLINOIS; PROFESSOR OF ORAL SURGERY, DEARBORN MEDICAL COLLEGE.

CHAPTER XXXVI.

In the foregone pages we have briefly sketched some of the physiological administrations of ether and chloroform for anesthetic purposes. The discussion of a subject which pertains to life and death of individuals, always carries with it an important feature that should ever be kept in mind, and that is the essentials of prompt and efficient action on the part of the administrator in case of an accident or in case of alarming symptoms. It is important that one should bear in mind that an examination should be made of the patient's heart and lungs, and that a cathartic should be administered, when possible, twenty-four hours before the administration. The patient should be placed in a reclining or horizontal position during the administration of ether or chloroform, and the mouth should be free from artificial dentures if there be any. The nose and lips should be covered with vaseline to prevent the irritating effects of the vapors from the drug. The patient should be free from a nervous condition and should be instructed to breathe as regularly as possible.

A number of drugs have been suggested preliminary to the administration of the anesthetic. The object usually is to prevent the arrest of the reflex of the respirations and the heart. Atropine at one time gained some favor in this respect. The spraying of the nose and throat with a solution of cocaine has a tendency to arrest the irritability of the mucous membrane, which is accomplished by the paralyzing of the sensory terminations of the nerve endings. Any one or all these conditions may be said to play but very little part in the prevention of alarming symptoms.

In the administration of chloroform or ether a suggestion has been made of diluting the vapors with oxygen instead of air, but the cases in which such procedure has been tried are so few in number that there is some question as to its value, but from a purely theoretical standpoint it would appear of but little value. It has been observed that many fatal accidents have occurred with ether and

chloroform after the patient had returned to consciousness, and in a few instances a day or two after the administration. But it may be said here that according to all the data gathered from such cases the difficulty lies principally to fatty degeneration of the heart, or kidney; in case of diabetes sometimes a bronchitis will follow, resulting in a typical and well defined pneumonia. Edema of the lungs may result from the administration of ether. But with all the observations that have been made the question arises, was the anesthetic agent responsible for these cases or was death due to the disease that was present?

In the general discussion of this subject the various stages of anesthesia are classed under the heading of first, second and third stages. In the first stages we have what we might call stimulative effects. This usually sets in with a feeling of warmth spreading all over the body, followed by a sensation of asphyxiation, with a smarting and pricking sensation of the mucous membrane of the nose and throat, and with an increase flow of mucus and saliva. The face at this stage is flushed, and the pupils somewhat enlarged; the pulse is accelerated and respirations increased. At this point there is somewhat excitement.

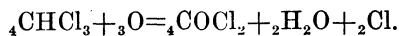
The second stage, sometimes called the narcotic stage, is ushered in with hallucinations and with a tendency of muscular rigidity, the patient soon losing control, with manifestations of loud talking, laughing, swearing and singing. In highly hysterical patients there might be convulsive forms of struggling, which, with the inexperienced administrator, is liable to bring about some alarm. The violence displayed by patients vary considerably with different individuals. In this so-called second or narcotic stage the face is usually reddened; the skin warm and moist; the pupils contract; the apex beat of the heart is more pronounced and the reaction to pain is very perceptibly lessened, but not obliterated.

The third or anesthetic stage is that condition in which it is aimed to produce and maintain complete anesthesia, and is manifested by paralysis of the brain. Motor reflexes and sensation and consciousness with reflexes are entirely obliterated. The muscles are relaxed; the pulse slow, and lowered blood pressure is indicated by the pulse being full and soft. Respiration is slow and shallow but usually regular, and the temperature of the body is lessened, which is most likely due to the muscular inactivity. When this stage has been reached with chloroform the face is pale. With ether the face has

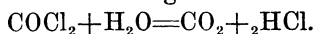
a cyanotic appearance. Under ether or chloroform at this stage the medullary centers become paralyzed, but care should be taken that it be not allowed to reach a dangerous degree, and the administration should be performed with great care. When the paralytic stage has been fully reached respiration becomes irregular and labored and with a stertorous sound.

As we have just stated at the first stage the respiration is fairly normal, but the anesthetic stage may be considered to be a dangerous stage, which is at the time of the paralysis of the medullary centers. In the secondary stages respiration is affected by struggling, alternated by stoppage and quickened respirations.

As we have just said, the cause of death under anesthesia is due to paralysis of the medullary centers, aided by direct paralysis of the heart. As a rule the respirations are the first to be affected and may sometimes completely stop, while the heart's action may be fairly good. The heart, however, is usually weakened and will suddenly stop, although it must be borne in mind that it may cease to beat long before respiration ceases. The heart has been known to stop in the very early stages of the anesthetic, which is probably due to the fact that the patient holds his breath and then takes a long inhalation of very much concentrated vapors, which causes paralysis of the respiratory centers. In case of a weak heart, depressed circulation may be due to the concentration of the vapors which gain entrance to the circulation, and acts directly on the irritability of the heart's muscles. Sometimes danger results from the impurities of the drug, not so much from imperfect manufacturing, but due to the decomposition of the pure product. It is said to be more common in chloroform than in ether. The decomposition of the drug most commonly results in the formation of a gas called phosgen, and free chlorine, and also hydrochloric acid. Chloroform is usually kept in dark bottles because such decomposition will take place from light. The chemical reaction is here given in order that a better understanding may be had:



Phosgen.



It is extremely difficult to say that all deaths on the operating table are due to the anesthetic agent. Some, unquestionably, are the results of decomposition or impurities of the drug; others may be due to the lack of proper administration. Some deaths may be due to

fright or some organic condition that might be easily affected by a few whiffs of chloroform or ether. A very interesting history of a case has been reported by Dr. Simpson, who introduced chloroform, in the very early stages of chloroform anesthesia. He had a patient on the operating table preparatory to a hernia operation, when the bottle of chloroform was dropped and its contents lost. When they started in to perform the operation, after going through the necessary function as though they were giving the chloroform, Simpson made the incision and the patient promptly died. This shows very conclusively that the anesthetic may not be the true and only cause of death, but, on the other hand, some other factors may play a very important part. The French surgeons report a very similar case. A patient was to be operated upon and his condition contraindicated the administration of a general anesthetic, but he demanded chloroform, and to calm him the surgeon held a cloth without chloroform before his face. The patient had taken but four inhalations of the air when he died. The great fear and dread of an anesthetic oftentimes renders persons quite incompetent to stand a surgical operation.

Another illustration of how persons may suddenly succumb to mental impressions is where a surgeon had prepared to do an operation without an anesthetic. He drew his finger nail across the abdomen, marking out the line of incision, when the patient at once screamed with pain and suddenly passed away. While we have discussed some of the features which are important in the administration of chloroform and ether, illustrating to a degree the precautions necessary, and the importance of duly considering every point in the use of such drugs. Care should be taken never to place these agents in the hands of incompetent or irresponsible persons on account of their dangers.

Besides the violent effects produced by anesthetics, the after effect is something that must be taken into consideration. A certain amount of gastric irritation is a constant phenomenon in the use of anesthetics, but they are rarely of a serious nature. By struggling and constant breathing, with an abundant flow of saliva, the patient may carry into the lungs from the mouth a large number of bacteria, capable of establishing a pneumonic condition. Therefore, it is essential before the administration of an anesthetic is begun, that the mouth should be antiseptically cleansed.

OPERATIVE DENTISTRY.

A Series of Shop Talks.

BY R. B. TULLER, D. D. S.

CLINICAL PROFESSOR OF OPERATIVE DENTISTRY, CHICAGO COLLEGE OF
DENTAL SURGERY.

No. V.

DELICACY OF TOUCH AND GENTLENESS IN OPERATIVE MANIPULATIONS,
AND SHARP INSTRUMENTS.

If there is any one thing that should be impressed more than another upon the student of dentistry it is delicacy of touch and gentleness in the use of instruments in operations on living, sensitive tissue.

At the best, more or less discomfort, if not pain, must accompany such operations, but a large part may be eliminated by first having the right kind of an instrument for the particular operation or part of operation immediately in hand, and then exercise, with constant thoughtfulness, delicacy of touch and movement, and gentleness both in manipulation and in the whole demeanor.

There is much in suggestion such as comes from the manner generally, and in the expression of one's face, and in the way one approaches his work; and then, with gentleness of touch and a few encouraging words, even to our most robust patients, a large part of the fear that everyone has, gives way to a feeling of confidence.

The dentist should be a kindly man. Who is there that would not put himself into the hands of a kindly man sooner than the severe one, even though the latter had reputed skill, a considerable measure beyond the first? Many a dentist and many a physician has held a large practice through life through a kindly face and manner, through evidences of a large and tender heart, when neighboring practitioners win encomiums for greater skill.

This, however, is no argument for foisting kindly and gentle qualities as one's principal armament in place of genuine equipment and skill; but first for proper equipment in every way expected of a professional man, and then backed by the other qualities, studied if not inherent.

Men of more than ordinary skill are often apt to be brusque in manner. Confident of their ability, they want to get "down to business," so to speak, without any nonsense. They are intent on the one thing that calls for their services; a good trait as concerns inanimate things, but not always in keeping with a calling that pretends and aims to alleviate human ills and suffering, for suffering is mental as well as physical.

Operative dentistry is real surgery, and when that is borne in mind one should approach the operation alert to obviate every discomfort that may be possible, consistent with doing the work in a proper and satisfying manner. If proper care and precautions are observed it will be but rarely, if at all, that an operator will cause needless pain and discomfort, and especially as regards unintentional jabbing or jamming the soft tissues adjacent to teeth operated upon. There should be studied guard upon every instrument inserted that it shall not, by slip or clumsiness, go where it is not wanted to produce shock and fear in the patient, if no harm has been otherwise really done.

In opening up a cavity of decay our first work usually is using enamel chisels to split off the frail and overhanging edges in a rapid manner. Sometimes burs are used from the start, but in either case the instrument should be selected for its adaptation to that special work and it should be SHARP. Too many operations are performed with dull instruments, and especially dull burs, producing unnecessary discomfort if not pain, and not doing the work due from the effort; and, hence, becoming tedious to say the least.

With chisels the direction of the cutting force is usually forward, hence the forward impulse should be guarded and restrained from going beyond what is required to split or shave off the enamel. If this is not done, by placing one or more fingers on adjacent teeth to support and steady the hand, the instrument may go into the cavity far enough to expose the pulp, and in any event producing a disagreeable shock with more or less severe pain. Or it may, in approximal cavities, jam up into the tender gum between the teeth or injure an adjoining tooth. Anyway, with the force and thrust that must be applied, unless a mallet be used, which generally should be, the patient is in dread or fear of hurt and injury. If, on the other hand, he realizes that the operator has the stroke guarded and under con-

trol, he feels easy, though it may hurt some, and his particular fear and dread of accident have been largely eliminated.

Some chisels are made with a shoulder a little way back from the edge for the purpose of stopping the forward movement. Other chisels are made in a variety of shapes that enables one to cut with a side stroke, with a hatchet cut and with a pull cut. Sometimes there is quite a bit of pain in the splitting off of bits of enamel, but the work is usually so quickly done that it has advantages over any other way, as burs, for instance, which produce hurts peculiar to themselves and not as tolerable with most people as the chisel work.

But one comes soon to the bur work which patients universally detest. The bur used should be sharp. A dull bur creates friction, and friction heat, that is painful, and it does not do the work except by tedious repetitions. If patients were wise about the action of dull burs they would forsake an operator who would use them. A keen, sharp bur in good, experienced hands eliminates to a great extent both pain and tediousness.

The time saved in the use of a sharp bur really makes it an economy to use them; then put them away for resharpening before it can be said they are dull.

In using burs, and especially sharp ones, good control must be had, for not only is one in danger of going unconsciously too far into the tooth, but without a firm, guarded grasp of the handpiece, the bur in certain positions will "walk" out of the cavity and tear away at the first lodging place, be it tooth or gum, often doing serious damage. It is not always possible to prevent this peculiar movement with one hand because of its suddenness, and, when possible, a finger of the left hand should be pressed on the extremity of the handpiece to guard and control it.

Dull burs and large burs, especially with blades some distance apart, are more apt to do this "walking" act, as machinists sometimes term it, than sharp burs. And again, the bur in rapid revolution is not so apt to catch and "walk" as in slow revolution; at the same time, with rapidity of motion there is more danger of serious damage from this ambulatory migration. Adjoining fillings have frequently been spoiled by this sudden accident.

Very often when a bur has a tendency to jump out and migrate it may be overcome by swinging the handpiece to the left or right, or up or down, so that the cutting contact will come at a different

angle. The tendency comes mostly when the bur is close to a margin and revolving toward it. In some instances a resort to the right angle handpiece will obviate the trouble. However, it is rarely that a change of direction of the angle at which the straight handpiece is held can not be made to overcome the difficulty; or that the work at that point can not be done as well or better with a chisel or an excavator in place of engine bur.

Delicacy of touch and gentleness in no sense implies that necessary firmness shall not be employed to perform the operation with thoroughness and dispatch. It does not mean in any sense a slipshod way of doing things. On the contrary, one may be very gentle and yet perform the work deftly, quickly and with precision. It is not essential to rapidity of action to grasp the parts that must be handled with a rough, harsh grasp, nor jam one's fingers into the mouth in a way to crowd the lips harshly over the teeth. One may draw the cheek back and stretch the lips to the limit in so gentle a way that the minimum of discomfort is felt; while a rough grasp and yank at these tissues not only hurts needlessly but inspires fear rather than confidence, and with the result, usually, that the patient will yield in that direction and move the head out of position, necessitating a readjustment and causing a waste of time.

In this connection it may be stated that when the lips are dry and parched in appearance the application of vaseline will tend to soften them and permit of stretching further without discomfort. A little thoughtfulness and attention to these small matters will generally be appreciated and make favorable impressions.

In the use of excavators, as with burs, they should be very sharp, and often should be whetted after a little use, being particular to have a clean, fresh surface to the stone that the instrument may not be contaminated by what may have been previously rubbed onto it. A few well directed, firm strokes with a properly selected and sharp instrument will do more and better work than the prolonged scratching that some operators employ with either sharp or dull instruments, and will hurt less. At least, the hurt that must be borne will be much more quickly over.

In scaling tartar from teeth it is necessary to go above or below the gum line in almost all cases. In the first place as delicate a scaler should be used as will dislodge the calcic accretions. To get above the edge of the gums will hurt no doubt more or less, but the

careful, gentle pressure that may be employed in doing so with a thin instrument will not hurt as much, by a long way, as the thoughtless and careless thrust that many operators employ, apparently as though there was no other way. Some gums, as with some teeth, are many times more sensitive than others, and some people who are thus unfortunate as to sensitivity, would rather submit to extraction, so far as pain is concerned, than suffer scaling.

Something may frequently be done with several preparations to benumb the gums in operations of this kind. Many operators do not hesitate to use some cocaine preparations for obtunding; some even using crystals of cocaine deftly worked beneath the free edge of the gum, protecting other parts from wasted particles. The writer does not advocate this as good practice, but mentions it for what it may be worth to those who understand the nature of so potent and so toxic a drug. Those who do not understand it would better try something else. A preparation called Phenol Sodique, used to slowly and deliberately wash the mouth out with, will often materially benumb the thin gum margins. This is a good antiseptic and may be used freely all through the operation. There are other things, but it is not the purpose of this paper to deal with obtundants. Suffice it to say that carbolic acid in several modified forms to reduce its escharotic character sufficiently, acts as a local anaesthetic on the mucous membrane and gum tissues. An effort in the direction of reducing pain is appreciated and the suggestion in it alone has its good effects.

This matter of suggestion in various ways may play an important part in all our operations. The use of an ordinary antiseptic mouth wash, and especially one that produces a tingling sensation, has good effect in many cases accompanied with the suggestion that it may help. The modifying of a foul breath by the administration of a deodorant and antiseptic wash may be done without giving offense by stating the real purpose, but suggesting that it may help, to some extent, in reducing pain.

Politic suggestion in a hundred ways all through all sorts of dental operations is almost always a decided help and to be commended.

Even your strong, husky patients, who will bear much without a flinch or murmur, will appreciate your efforts just the same to be gentle and hurt as little as possible. No one enjoys pain, though en-

dowed with Spartan stamina. They don't want baby talk and namby-pamby exhibitions of tender hearted sympathy, but if the dentist admits that, at best, the operation has its decided discomforts and suggests or states the fact, as he goes along, that he is thoughtful and considerate about every move and doing as may best be done to avoid discomfort consistent with thorough work, it is reassuring and satisfying to reasonable people. To lay down any sort of rules, general or specific, to fit the cases of some inconsiderate, unreasonable, whimsical people is not possible. Each such case must be studied apart, by itself, and if a way is not found to bring them into the necessary subjection for operation, after repeated trials, most dentists are willing to let the other fellow try it; and that possibly is the best solution of the problem; for such patients will soon find that some degree of discomfort must be put up with if their teeth are to be kept in repair.

It is incumbent, however, on every dentist of today to study with thoughtfulness the elimination of every needless pain and discomfort, and much may be done if the thing is kept uppermost in mind as the patient takes the chair.

(To be continued.)

ORIGINAL CONTRIBUTIONS

TOOTHsome TOPICS.

BY R. B. TULLER.

Gooms. A goomy subject.

There are a good many people with numerous evidences of culture—as well as many without—who come in to you and talk about their “gooms.”

Is it not so?

Not long ago I made two plates for a lady with apparent evidences of intelligence and refinement, who told me she lost all her teeth years ago by “consumption of the gooms.”

I have another lady patient who is the wife of a clergyman, and who dotes on her correct choice of words and phrases in well modulated and cultured voice; but do you think she would ever let herself down to just commonplace, if not vulgar, gums? Not on your twelve-dollar-a-dozen photos!

I iterate gums, reiterate gums, emphasize *gums* for her benefit, but she never allows herself to be tricked into use of my common verbiage. In fact, she endeavors, I think, to correct my mistake, or provincialism, by emphasizing gooms, with three o's, much as I emphasize gums with one u.

“Now, doctah, I have come in for an appointment to have my teeth *cleansed* and my goooms looked after. I have a *vurry* great horrah of contracting that terreeble disease of the goooms that you dentists have such an unprounouncable name faw; pyrorrosis, pyore-sis, pyorritis, or something like that; I nevah can remembah. I cahn't come tomorrow, naw the next day. Let me see; it will have to be some day next week. I cahn't come on Monday, and I cahn't come Tuesday, faw that is my day at the West End. I think, if you can give me an houah on Wednesday, I can come then. Oh, no, I cahn't come on Wednesday eithah; I am going with Mrs. Pottah to the matinee. You cahn't see me on Thursday or Friday, and I don't want to come on Saturday. Well, then, can you let me have an houah on the following Monday, say at 10 o'clock? Thank you,

Doctah. Oh, what shall I do for my gooms in the meantime? I thank you *vurry* much, Doctah. Good day."

And a lady from Philadelphia says it pleases the ear better to say gooms. "Why, they'd think I meant me rubber shoes at home; for we all say, 'Where are me gums?' when we are going out on a wet day."

You all know the fellow with his nose stopped with a cold, or lips swollen, who comes in and talks about his "goob-bile," or "gub-bile," according to the way he has been educated.

A young lady came to me one day whose anterior teeth were all out in the cold, cold world, as well as three-fourths of an inch of gums exposed above them. She wanted to know if there was any remedy. "I show my gooms so much," she said.

I couldn't think of anything but stitching a fringe on her upper lip—except the more serious operation of sawing out a horizontal, V-shaped section above the apex of the roots of the teeth, bringing the remaining parts together and wiring them.

I was about to perform that operation, but she wouldn't hold still, and she went her way and still remains a goomer. Her mandibular expression is something fierce.

Did you ever bump into such an open countenance? Looking at it one way it is a wise provision of nature that she hasn't got a two-and-a-half or three-inch lip to cover the exposure. I'd prefer, of the two, to have my goomery out in the weather. Isn't it a pretty general rule that such people, so afflicted, have more *gum-ption* than usual? (!!)

I told you once about the German who had his last tooth taken out, for good cause, and exclaimed, as he realized the loss, "Nothing but gumps! Ach, Gott! I can now chew vindt only yet!" Some Germans call their gums meat. "Say, Doc, dot meat aroundt my toots iss all sore. How iss it?"

I heard a pretty good one not long ago. An Irish woman who had lost her teeth some time before, went to a certain dentist one day and asked: "Air ye the goom doctor? Oi was told that ye did nawthin' but doctor gooms." Upon examination no diseased condition was found, but she persisted that there was a great "weeping" in her mouth and something was wrong. Being beyond this doctor to diagnose, he told her she had better go and see Dr. Brophy.

On admittance to Dr. B. she announced that she had come to con-

sult him about "leakin' gooms." "My gooms, Doctor, do be leakin' all the toime." This puzzled even Dr. Brophy. What in the world were 'leakin' gums'? He proceeded to diagnose the case, anticipating an abscessed condition, but found, as did the first dentist, that the gums were remarkably healthy and hard, and that her trouble was largely imaginary. The salivary glands were no doubt very liberal in action and the woman worried and called it a case of "leakin' gooms."

In the course of the interview Dr. Brophy remarked that he was just preparing for a start to Europe in the morning.

"Well, well," said the woman, "so ye air goin' back, air ye? Ye have been over a long time, av course, an' ye've done well, an' now ye're goin' back to the ould sod? Well, good luck to ye, Doctor. Oi'd like to be goin' back mesilf, wance, before Oi die. Good luck to ye."

She somehow caught onto the fact that Brophy was neither a French nor an Italian name, but how did she guess it? She ought to hear Dr. Brophy sing a German song and she would perhaps exclaim, "Hoch der Kaiser under der Vaterland!"

Well, passing on, it is bad enough for the laity—some of them—to say gooms, but when a dentist talks gooms he ought to have his diploma annulled—if he has one.

As dentistry is being divided up into specialties and wonderful discoveries are being made, like "alveolar dentistry" and the gingivopneumatic process that you read about in Toothsome Topics, we need not be surprised some day to see emblazoned on some State street window something like this: "Dr. Badd, D. D. S., M. D., Goom Specialist. Goom-warts and -tumors scientifically treated by a new process."

To be candid, I've sometimes thought of starting a goomery myself. I've got a goom remedy that can't be beat. I may start a school for the unsophisticated and commonplace dentists of the city and country, giving each one who pays the \$50 fee, and attends four weeks, a certificate that will start them out as specialists, if they wish.

Or, I may organize a co-operative stock company and let in a select few of the most prominent dentists on the ground floor, for testimonials, and the rest in on the common stock with dividends of 3 per cent quarterly; provided they "cough up" for ten shares, ten down and the balance to be paid for out of dividends—*me* to hold the stock until paid for—if we live long enough. I need the money.

Look at the 1,001 gum remedies (antiseptic washes) in the market now, and more a-coming. And still there's room. I can clearly

show by the sworn affidavit of an analytical chemist of national repute, and the endorsements of a number of prominent researchical dentists, that I have got a goom remedy that skins the whole bunch—and won't skin your tongue, at that. I am willing to make known the ingredients and print them on the bottle. It is tar, tannin and trikoline.

But the method of mixing and using the dope—ah! that's my secret. If I don't form a co-operative stock company I may conclude to impart it to my confreres for the small fee of \$25.30 and a promise on their honor as high-toned dentists to never "give it away" to others until I've worked all the large cities and big country towns; or otherwise free them from their solemn obligation, so help me.

The thirty cents? Oh, yes. Why, that's a mere figure. A figure of speech I might say, indicative of your feelings after that solemn promise and separation from \$25. There are more teeth lost by "consumption of the gooms" than by caries of the teeth themselves. Get wise and be up to date. Come on in; the water is fine! Tie up to Tar, Tannin and Trikoline for the gooms.

And don't forget the \$25.30. By mail for a P. O. or Exp. order.

For out-of-town checks please add another 30c for exchange.

Come on in; the water is *real* warm!

(Toothsome Topics Every Month.)

"WORDS AND DEEDS THAT LAST FOREVER."*

BY DR. B. J. CIGRAND, CHICAGO.

Mr. Toastmaster, Honored Guests, Ladies and Gentlemen—It is indeed an honor to be present at this distinguished gathering and to be elected as one to speak at this prandial board is a consideration one may well cherish as a high compliment. The subject assigned to me is one so far reaching and so intimately interwoven with the evolution and career of the present civilization that I hesitate the opening sentence in the fear that I know not where to begin and see not where to close; and this feeling so pervades my being that I am tempted to leave off just where I start, hence saying nothing. This, however, will not be in accord with your generous requirement and in the language of the bard of Avon I command myself to the thought "If 'twere done when it were done, it were better it were done quickly."

Shakespeare tells us that "words are kind of deeds"; this we read in his Henry the VIII, and I am led to the belief that this truth is too often overlooked or too frequently underestimated. I hold to the idea that words are living things, that they are an existing power, that they have an innate influence in every praiseworthy act or deed. Words are the foundation upon which most of the great acts, deeds and even epochs rest; they are the ideal upon which is later founded the real. Words are in the truth of things a synonym of deeds, for one is to the other as is the bow to the string, oft found apart but best and most important when bound together. Yes these empty, meaningless words are really filled with life; they travel, they continue to exist, and most of all are prolific and constantly bringing fruit. Whether orally spoken or whether found cold and quiet upon the pages of the books enshrined in our numerous libraries, these empty, meaningless words are working, generating and living a most active life. In the vocabulary of the pessimist—Words are without meaning, they are dead; but in the language of the optimist they are a flame bursting forth with vigor and action. For long since, yea, long before, our form of civilization the ancients well understood their relationship to life and they framed the thought that "Deeds are but the children of words."

* Toast at Illinois State Dental banquet, Springfield. Occasion, presentation of Senator Clark testimonial.

Let the impression be yours that words are deeds, and should you incline to the idea that they are idle and no kinship to deeds, pardon me if I remind you that it takes courage and even high forms of heroism to speak or write these things we call words. They are an element in the expression of our feelings and this in turn is the exponent of our thoughts, passions, or the emblems of our ambitions and the portrait of our inner lives. I repeat it requires character, manhood and fortitude to express the words that stand for rights or that your war for liberty.

Who can doubt this when we look back to the fearless Cromwell. We can see him with firm step approach the king and with unfaltering voice reply to his sovereign in tones that have meant so much, in words that burned with truth. Knowing as he did the gravity of his remarks to the powerful Charles the first, yet with his bosom filled with indignation and his being roused to patriotism he dared to say to a king: "'Tis true you are the king but it is also true that you are our servant." Did the speaking of these words mean anything? Will these sounds from the mouth live? Read the answer in the history of England and find its echo in your own native land.

When the good Christian soul, John Huss, was dragged out into the streets and by his inquisitors tied to the post and asked to recant and retreat from his liberalism in Christian faith, we hear him say to the angry religious mob: "No, I will not retreat. You can have my body, but not my soul, that I resign to my God." The burning faggots with smoke and flame hid his face from the mob, but he stood firm in his remarks and died a religious hero. Did the deeds evolve from his words? Ask yourselves and find the answer in your national constitution.

In our own country many and matchless are the instances where a word was the deed. Away down in the old dominion of Virginia we learn of the initial steps of great men, yes, giants, in their attempt to merit the blessings of liberty. And our minds undirected turn to one youth. In the assembly of that old colony when still under the rule of George III a young man dared to rise in the midst of delegates, who were yet loyal to the king and owed their allegiance to the British colors. But the young man had words he wished to say; he anxiously waited to express his mind, and when he arose he was the embodiment of Virginian patriotism and in one brief speech overflowing with eloquence and pouring forth such a silvery stream of truth that his words enchanted all and in the crucial moment he

exclaimed to those who interrupted or attempted to intimidate these words of defense and offense: "I know not what course others may seek, but as for me, give me liberty or give me death." In this statement you have the battle cry of all the colonists. Were these words a form of deed? They most emphatically represent an act and the words of Patrick Henry were the inspiration which opened and closed your war for liberty. (Applause.)

In the northern colonies an incident transpired which might well be included in this chain of evidence. Washington had just taken command of the troops. He desired a volunteer as a spy to learn of the strength and plans of the British, and a New England lad offered his services. His prompt acceptance and all that led to his capture is too clear to you to deserve detailing here. We are taken to an orchard and beneath an apple tree standing on the latter with rope about his neck we behold Nathan Hale. The British without military trial are about to hang him as a spy. They ask him if he wishes to say anything before the death sentence is meted out. He replies, "I would like to kiss the Bible my mother gave me." To this the provost sharply replies, "No." Then he is asked is there anything else you wish to say. Hale then asks, "Let me read the last line of the letter from my sweetheart." The British officer answers this by tearing the love letter into chaff before Hale's eyes. Then the provost in angry tones says, "Is there anything else you would like to say?" Hale's being is now aroused to the full capacity of his patriotic impulse. He stands erect, turns his face heavenward, and gazing into azure sky he speaks those undying words; those words that are the soul of patriotism—"I regret that I have but one life to give to my country."

In the face of such facts there are still men who take the Tyller-and version of the meaning of words and language. He, you will remember, said: "Language was invented to hide men's thoughts and feelings." This construction on the purpose of language is in direct opposition to the facts; for I must take exception to the statement of the distinguished Frenchman. Words are for a more noble intent; they transmit the life and soul of human beings in whom the impulses of nature have not yet fallen to the low ebb of mockery; words with the human family are used in the interest of every known form of progress and they stand as representatives of our beings, bringing brine to the eye and gladness to the heart.

Your applause lends comfort to me, though your absolute silence

too has a language whose words I understand. For silence speaks often as expressively as does the tongue. Our honored guest, Governor Deneen, can verify that in the courts silence is recognized in testimony. He will bear testimony that law construes "silence as giving consent." But on occasion such as this silence would not yield the fullness of expression; let us take to heart the kind words of the governor; let us be encouraging; let us be appreciative and let these words of kindness come to the living, thus making life sweeter, and in return we shall be the ones who shall profit. Let us not forget that kind words made Watt the inventor; encouraging words made of West the renowned painter, and comforting words made Washington the hero. Words are deeds and it requires courage, heroism and fortitude to speak them.

Words, empty, idle and meaningless words brought Raleigh to the cell; words led Bunyan behind the bars; words placed Paine within the prison and words forced Galileo into the darkness of the dungeon, but it was the self sacrifice and self denial of these heroes of expression which have emancipated the human tongue and brought sunlight to the human mind.

Great wars and disputes of nations have been avoided and thus thousands of lives spared by the intervention of words. We gladly refer to the time when France demanded of this country the humiliation of revenue. The country had the rare fortune of a powerful American as its ambassador at the court of France and when the test of national pride was provoked it was Pinckney who could voice the sentiment of a republican form of government and in one sentence allay war and restore peace and good will; his reply being, "Millions for defence, not one sent for tribute."

Within the precincts of this distinguished hotel was reared, though born in Kentucky, a son destined to serve the people with both words and deeds and his life bears out the fact that words are the mothers of deeds, for what he early preached to the populace he later enacted into history. This beloved and venerated representative of all that we hold dear was a pronounced commoner who was the pillar of strength when the fabric of our nation was weighted down in fratricidal strife. He too has given us words that shall live forever. He has emphasized the essence of all religions and summarized the soul of the Christian creed. Lincoln said, "With malice toward none and charity for all."

And when this country was convulsed by the assassination of

this giant from Illinois and the country was awe stricken by its effect, when men knew not what the death might bring and in the uncertainties of the hour when all government power seemed lost, words, only words, were used to restore respect for law and order. The people had never experienced the calamity of such a shock. The disorder was so great that something must be done and without delay. You might move troops up the street and march soldiers down the street, but this meant nothing to a frenzied and revenge seeking populace. The law makers recognized the power of eloquence and they demanded that James A. Garfield speak to the people, and in this instance the powerful influence of the right word in the right place and at the right time was most potent. Garfield stood on the balcony and in clear and distinct words he said to the expectant crowds: "Fellow citizens: God reigns and the government at Washington still lives." This exemplifies what words can do and portrays that words are a form of deed.

But I have been selected to show that words and deeds go together as handmaids of one intention. You have asked that I represent these forty-five dental societies. I feel my incapacity and fully realize the shortcoming of such an undertaking, and Governor Deneen and Senator Clark, let me assure you that this is the most representative gathering of dentists ever placed under the auspices of the Illinois State Dental Society. These men come from every city, town and hamlet of our great State and they bring you glad tidings. Governor Deneen, it was by your signature that the dental profession was raised to a higher and more noble plane, and let me assert in the presence of these distinguished witnesses that the law was not demanded in the interest of those here assembled nor in the interest of the dental profession, but it was championed by these men and societies in the hope of protecting the people whom you so ably represent.

We are familiar with the hardships of Senator Clark, we are acquainted with the task he so ably performed; we know that he allowed other ambitions to sink with the sun beneath the western skies; and he remained faithful to his pledge to us, and not unmindful of this loyalty these dental societies, colleges and institutions had formulated respective resolutions of appreciation and in this beautiful book are words blazoned in bold type expressive of our high regard for your deeds. Accept this gift of words and know that these words stand for sincerity and express the warmth of gratitude. (Applause.)

NOTICES OF MEETINGS

NATIONAL SOCIETY MEETINGS.

- American Society of Orthodontists, New York, December, 1906.
Institute of Dental Pedagogics, Chicago, December 27, 28, 29.
National Association of Dental Examiners, Atlanta, Ga., September 14, 15, 17.
National Dental Association, Atlanta, Ga., September 18.

STATE SOCIETY MEETINGS.

- Florida State Dental Society, Atlantic Beach, June 13, 14, 15.
Indiana State Dental Association, West Baden and French Lick Springs, June 26-28.
Kentucky State Dental Association, Louisville, June 12, 13, 14.
Minnesota State Dental Association, Minneapolis, June 11, 12, 13.
Mississippi Dental Association, June 6, 7, 8.
Texas State Dental Association, Galveston, June 14, 15, 16.

SOUTH DAKOTA STATE SOCIETY.

The South Dakota State Dental Society will hold its next regular meeting June 12, 13 and 14, 1906, in Vermilion, S. D.

W. F. PRICE, Sec'y,
Vermilion, S. D.

NOTICE!

Time and place of annual meeting of Kentucky State Dental Association has been changed. To be in Louisville during Home Coming Week, June 12, 13 and 14. Special railroad rates from all points, beginning Saturday, June 9. A big meeting expected.

W. M. RANDALL, Sec'y, Louisville.

MONTANA STATE BOARD.

The next annual examination of the Montana State Board of Dental Examiners will be held in the city of Helena on July 16, 17 and 18, 1906. For further particulars communicate with Dr. B. J. Keenan, secretary of State Board, Butte, Mont.

THE MINNESOTA STATE BOARD OF DENTAL EXAMINERS.

The Minnesota State Board of Dental Examiners will hold a special meeting on June 14, 15 and 16 at the Dental Department of the State University, in Minneapolis, Minn., for the purpose of examining those who desire a license in Minnesota. All applications must be in by noon of June 14. For further information address,

DR. GEO. S. TODD, Secretary,
Lake City, Minn.

MICHIGAN STATE DENTAL ASSOCIATION.

The semi-centennial meeting of the Michigan State Dental Association will be held in Detroit, July 9, 10, 11, 1906. A most cordial invitation is extended to all reputable practitioners to attend this fiftieth anniversary of the association, and a most interesting program is in preparation to celebrate this important occasion.

EDWARD B. SPALDING, Secretary.

INDIANA STATE DENTAL EXAMINERS.

The Indiana State Board of Dental Examiners will hold its next meeting in the Capitol building, Indianapolis, beginning at nine o'clock, Tuesday, June 12th. All applicants for registration in the State will be examined at this time. Applications must be filed with the secretary not less than five days prior to above date. For further information apply to

F. R. HENSHAW, Sec'y,
Middletown, Ind.

IOWA STATE BOARD.

The Iowa State Board of Dental Examiners will hold its next meeting at Iowa City, beginning at 9 a. m. Thursday, June 14th. Practical examination will be held in operative dentistry and written examination in the following branches: Anatomy, physiology, chemistry, metallurgy, oral surgery, materia medica, pathology and therapeutics, histology, hygiene, orthodontia, dental jurisprudence, bacteriology, operative and prosthetic dentistry.

All applications for examinations must be filed with the secretary by June 5th.

For application blanks and further information, apply to

E. D. BROWER, Sec'y,
Le Mars, Iowa.

JOINT MEETING AT CLEAR LAKE, IOWA.

The E. K. Wedelstaedt Club of Iowa and the G. V. Black Club (Inc.) of St. Paul, Minn., will hold a joint clinic in Clear Lake, Iowa, on June 25-26, 1906.

A cordial invitation is extended to all reputable practitioners. There will be reduced railroad rates on all roads to this summer resort.

For further information address William Finn, Secretary, room 28 Kimball building, Cedar Rapids, Iowa.

SOUTH DAKOTA STATE BOARD.

The next meeting of the South Dakota State Board of Dental Examiners will be held at Sioux Falls, S. D., beginning July 31, at 1:30 p. m., and continuing through the days of August 1 and 2. All persons wishing to take the examination must send in the examination fee of \$10 before July 24. Candidates must bring operating instruments, including dental engine and such other appliances and materials as are necessary to do crown and bridge work.

G. W. CULLINS,
Vermillion, S. D.

NEW JERSEY STATE DENTAL SOCIETY.

The New Jersey State Dental Society will hold its annual meeting in the auditorium, Asbury Park, N. J., commencing Wednesday, July 18, and continuing until Saturday, July 21.

Accommodations can be secured with the Hotel Columbia at a rate of \$3.00 per day two in a room, and \$3.50 per day for one person in a room. Write early and secure your room.

A smoker will be given the members, guests, and exhibitors on Thursday evening, July 19, at 10:30.

Pennsylvania and the Central Railroad of New Jersey carries passengers from all points to Asbury Park. Over 800 dentists registered last year.

Many new demonstrations and clinics the great feature of this meeting. Asbury Park, a splendid place on the sea shore to spend your vacation, and the State Dental Society for the best instructions to help you in your work throughout the year. Cut off from the 18th to the 21st and come and see for yourself.

CHAS. A. MEEKER, D. D. S.,
29 Fulton St., Newark.

INDIAN TERRITORY DENTAL ASSOCIATION.

The third annual convention of the Indian Territory Dental Association was held April 26-27. The officers for the ensuing year were elected as follows: Dr. S. A. Long, of South McAlester, president; Dr. A. E. Adams, Ardmore, vice-president; Dr. F. A. Stickel, Muskogee (re-elected), secretary; and Dr. A. L. Walters, of Checotah (re-elected), treasurer. Drs. Wright, of South McAlester, and Williams, of Durant, were elected as committeemen.

WISCONSIN STATE BOARD OF DENTAL EXAMINERS.

The next meeting of the Wisconsin State Board of Dental Examiners for examination of candidates for license to practice dentistry in Wisconsin will be held in Milwaukee June 18, 1906, at the Wisconsin College of Physicians and Surgeons, Milwaukee.

Application must be made to the secretary fifteen days before examination. The candidates must be a graduate of a reputable dental college or have been engaged in the reputable practice of dentistry for four consecutive years, or an apprentice to a reputable dentist for five years. For further particulars apply to

J. J. WRIGHT, Secretary,
1218 Wells Bldg., Milwaukee, Wis.

THE SOCIETY OF DENTAL SCIENCE OF ST. LOUIS.

The Society of Dental Science of St. Louis elected the following officers for the ensuing year: Adam Flickinger, president; Emma Eames Chase, vice-president; Geo. H. Westhoff, secretary-treasurer; Richard Summer, curator; E. P. Dameron, D. O. M. LeCron and F. S. McKay, board of censors.

GEORGE H. WESTHOFF, Secretary.

WISCONSIN STATE DENTAL SOCIETY.

The thirty-sixth annual meeting of the Wisconsin State Dental Society will be held at Madison, Wis., July 17, 18 and 19, 1906. The program committee is arranging an unusually interesting program. Some of the most eminent men in the profession will be with us and all indications point to one of the best meetings ever held in Wisconsin. All ethical dentists are most cordially invited to attend.

W. H. MUELLER, Secretary,
21 W. Main Street, Madison, Wis.

MISSISSIPPI DENTAL ASSOCIATION.

The thirteenth annual meeting of the Mississippi Dental Association will meet in Gulfport, June 6th, 7th and 8th.

All ethical practitioners of this and other States are cordially invited to attend. Every effort is being made to have this the largest and most profitable meeting ever held and the pleasures of Gulfport, on the coast, at this time of year, is a feature in itself.

Reduced hotel accommodations and the usual reduced rates on all railroads will be obtained.

For complete details address the secretary. Yours truly,
E. DOUGLAS HOOD, Sec'y.

THE CLINICAL CONFERENCE OF THE NEW JERSEY STATE DENTAL SOCIETY.

An opportunity is afforded anyone having a difficult case in surgery, orthodontia, operative or prosthetic dentistry to present the case for consultation at the coming meeting in July at Asbury Park, N. J. It is hoped that advantage will be taken of this chance to get the opinion and advice of men of exceptional ability in their special lines. Correspondence is solicited.

The committee desires a concise history of the cases on or before May 30th if possible.

J. G. HALSEY, Chairman,
Swedesboro, N. J.

IOWA STATE TO REORGANIZE.

The State Dental Association, which is meeting in the city for a three days' session, will act upon the recommendation of President C. M. Work in his annual message today and redistrict the state into official clubs. These clubs, which will have study clubs, will be affiliated with the State organization, and the special work will be more specialized in the annual meetings. The class of clinics is the largest in the past history of the association, and over two hundred dentists are attending.

OKLAHOMA DENTAL SOCIETY.

After selecting Oklahoma City as the place for the next meeting the Oklahoma Dental Association elected A. T. Dougherty, of Oklahoma City, president; A. T. Cramer, of El Reno, vice-president, and C. L. White, Oklahoma City, secretary and treasurer for the ensuing year.

IOWA STATE DENTAL SOCIETY.

The Iowa State Dental Society met at Des Moines May 1, 2, 3, and elected the following officers for the ensuing year:

President—William Finn, Cedar Rapids.

Vice-President—C. E. Woodbury, Council Bluffs.

Secretary—C. L. Topliff, Decorah.

Treasurer—G. W. Slingluff, Butlington.

Executive Council—W. G. Crandall, of Spencer; F. W. Conover, of Decorah; H. F. Echternacht, of Marshalltown.

Place of next annual meeting, Cedar Rapids.

ILLINOIS STATE DENTAL SOCIETY.

Officers were elected as follows: Dr. Elgin Mawhinney, of Chicago, president; Dr. Thomas P. Donelan, of Springfield, vice-president, and Dr. A. D. Black, of Chicago, secretary and treasurer. Three new members of the executive committee were elected. The next meeting place of the association was decided upon as Quincy, the meeting to take place the first week in May.



EDITORIAL

Within the last few months there have been placed before the dental profession two or three new dental journals, which apparently mean to discuss certain phases of the theory and practice of dentistry, as well as some of the political conditions which seem to be rankling in the minds of some of our worthy brethren.

The Dentists's Magazine, edited and published by our Cleveland friends, is a worthy contribution to the literature and the better education of the dental profession. *The National Dental Critic* has put forth two issues which indicate that either there is something radically wrong in Washington, the capital of this great country, or that there is something wrong in the politics of our National Dental Association.

Dr. Emory A. Bryant, editor and publisher, has put in print some material which, if true, places one of the blackest of marks upon the quality and sincerity of an organization which should stand for the highest and best in dentistry throughout the entire world. If these gentlemen are guiltless of these accusations, means should be established at once to keep such publications from getting into the hands of the general profession. If Dr. Bryant's statements are proven, the dental profession of this country should at once withdraw all support from the National Dental Association. If the *National Dental Critic* is correct in its statement, the story that was told last year that the presidency of the National Dental Association was handed out for certain work in the International Dental Congress in St. Louis may be true. Unfortunately, the organization known as the National Dental Association has been run very largely for the personal aggrandizement of a certain few.

It is interesting to note the career of a number of individuals who have constantly kept their hands upon the throttle of the National Dental Association, and not only in this association, but also in the State and local organizations. The science of politics, if honorable and for the betterment of all parties concerned, is the wisest and most efficient science that man with brains can take up and analyze, but when conducted in the manner that the *National Dental Critic*

seems to suggest of the National Dental Association, it is a disgrace to the profession of dentistry throughout the civilized world. If these men who are accused by Dr. Bryant don't come out and make clear the falsification of the accusation against them, I, for one, am in favor of advocating absolute desertion of the National Dental Association by the profession, because no man with a particle of respect for his profession should ever countenance or allow such literature to be circulated to the world.

We oftentimes hear men complain that there is too much politics in our professional societies, and it is up to the dental profession to at once adopt means and measures to completely demolish either the *National Dental Critic* or the National Dental Association; for it is a disgrace to the dental profession to have such literature thrown broadcast. If these things are not true, they should at once be branded as false.

The dental profession has gained but little respect from the general public, and the good, substantial part of the dental profession is becoming more and more to look upon the so-called big guys as simply soap bubbles. Dear old Dr. Taft, and men of his stamp, seem to have left the reins of the profession in the hands of many who are incompetent, from a sincere standpoint, and incapable of holding up and making American dentistry continue in its upward course, as it has in years gone by.—G. W. C.

ILLINOIS STATE DENTAL ASSOCIATION.

The forty-second annual meeting of the Illinois State Dental Association has become a part of dental history, and marks some of the interesting events of dentistry in the middle West. Taking all things into consideration, it was probably one of the best meetings the Association ever held. There were several interesting events of the meeting and some which especially marked it as of great importance. The program was full of interesting and profitable suggestions. The program of papers was of special interest and the discussions were of a very high order, and all in all every one who took part should be proud of the success of the meeting.

Some of the events marked the occasion as eventful and profitable. One was a paper by Dr. J. N. Crouse, entitled "Some Forty-Odd Years in the Practice of Dentistry." The discussion of this paper was

followed by Dr. G. V. Black and by Dr. Rohland, of Alton; also Dr. Lawrence, of Lincoln. The discussion by these three able men was a treat to all present. Dr. Rohland and Dr. Lawrence added much glory and lustre to their names, as well as to the dental profession of this State. What a grand and glorious thing it is to have such men as these to bring back to the minds of the younger men the various phases of dentistry back in the earlier days of the association, and if Dr. Crouse's paper had done no more than to bring out the discussion, it was worth all the time that was expended in the arrangement of the paper.

Another feature which was of great deal of interest and contained something worth being borne in mind, is the showing that the younger men made in their papers and discussions. Another event of this meeting was the Clark banquet. Senator A. C. Clark was tendered a dinner by the dentists of the State of Illinois for his services in the passing of a dental law in the State of Illinois. Every society and institution in the State, in which dentistry is in any way connected, entered heart and soul into this occasion, to make it a brilliant success and do honor to Senator Clark, who has rendered a public service that will never be forgotten, especially by those who will have to seek services at the hand of the dental profession.

Dr. Donald MacKay Gallie was the toastmaster and in his characteristic manner acquitted himself very well. Governor Deneen was also present and made a very fine speech, which not only pleased, but was profitable to all who heard it. Dr. B. J. Cigrand made the presentation speech, and on closing handed the senator a beautifully designed book, containing resolutions from every dental organization in the State. Drs. T. W. Brophy, C. N. Johnson and C. B. Rohland made fine addresses. Mr. Clark was much affected and showed marked emotion in accepting the gift from the dental profession. President James, of the University of Illinois, was also present and made a good talk and one that the dental profession appreciated. Coming as it did from the president of the great university of a great State, it made a profound impression upon all, and especially those who were interested in this great commonwealth and university, which is doing more than any other one factor in bringing about the recognition of the true educational spirit in this section of the country.



SELECTIONS

THE PREPARATION OF A CAVITY TO OBTAIN AN ACCURATE MATRIX FOR STRENGTH AND PERMANENCY OF A PORCELAIN INLAY.

BY W. H. UPJOHN, D. D. S., LAFAYETTE, INDIANA.

Approximal cavities with the incisal edges in good condition are prepared from the lingual portion of the teeth with a groove on the lingual surface, with parallel walls toward the labial, to form a mortise.

For the half-moon-shaped cavities in incisal edges, cut a half-circle groove to correspond with the cavity. Labial and buccal cavities need no more anchorage than the solid, slightly obtuse angle walls give, except the grooves cut after the inlay is completed, before cementing. Approximal cavities of molars and bicuspid are prepared with parallel walls and slight grooves with a flat bottom. Where the approximal occlusal cavities are found, a step cavity is indicated when much of the tooth is gone. When the whole of the lingual or buccal portion of the molars and bicuspid is gone, the step cavity with grooves at the gum margin and occlusal part of the cavity is indicated.

Where the restoration of incisal edges is indicated, platinum pins should be used for anchorage, and for additional anchorage a small groove is cut from the mesial and the distal on the incisal edge of the tooth within one-sixteenth of an inch from the approximal surfaces, and at each end of the groove a hole one-sixteenth of an inch in depth is drilled, a size larger than the pin used, so that the latter will not bind in drawing. The length of the pin to extend into the porcelain depends on the size of the restoration, which will be left to the judgment of the operator. The best mode of operating to get the matrix and pins into the proper position, after the incisal edge is ready with the groove and holes drilled, is to cut the pins the desired length, place them aside and burnish or swage the matrix;

Read before the Indiana State Dental Society, 1905.

when completed punch holes with a sharp-pointed instrument a size smaller than the pins so that they will fit tightly in the matrix. Now place the pins through the matrix into the holes in the tooth; secure the sticky wax and remove the matrix and pins carefully and invest in powdered asbestos mixed with water or alcohol, or a platinum or fire-clay slab. When dry and the sticky wax is burned off, cool and proceed to build up with the foundation body around the pins, dry and bake to a high biscuit; when cool, build up the second time in the groove and over the pins as high as the foundation body is desired and bake to a high glaze. Finish with the enamel body without removing the case from the investment, unless in doubt about the outer edge of the matrix or the contouring, in which event it can be removed and fitted into the tooth before the final baking.

Incisor Restorations.—There is another form of restoration which I wish to speak of before going further and that is where incisors have a large corner broken off by accident and the nerve is still alive, my method is to prepare the approximal corner for one platinum pin and a groove at the remaining corner of the tooth.

The platinum pins used for porcelain restorations should be the diameter of long-pin teeth used for bridgework. Any heavier wire would weaken the porcelain. Where step cavities are used for incisors, bicuspid or molars, the reverse curves are much stronger and easier of access for the inlay than right angles. Several of our leading porcelain workers in finishing cavities where the inlay shows on the labial surface, to produce a better joint and hide the line of cement, always very prominent when first cemented, advise grinding the labial edge of the enamel to a slight acute angle and in placing the inlay in from the lingual portion of the cavity the inlay and enamel edges are going to wedge closer together than where finished without an acute angle from the lingual portion of the cavity. Also, the inlay will have a better edge to it when finished with a slight obtuse angle, otherwise it is apt to chip off and show a rough edge.

The lingual margins can be finished at a right angle with the surface of the tooth. All inside angles and corners of a cavity should be slightly rounded to make it easier of access, so as to get a more accurate matrix. It is extremely difficult to obtain one from a cavity full of sharp right angles. A good fitting matrix means a close fitting inlay. All cavities properly prepared will be easy of access, to allow the easy withdrawal of the matrix or impression

without marring, a condition necessary for the insertion of the inlay when completed.

Obtaining the Matrix—Before preparing a cavity on an approximal surface, the teeth should be well separated. The matrix can be obtained in two ways—by burnishing or swaging. In practice the two methods are used in preparing a single matrix, as will be explained later. We can not use the one method alone. There are advantages in both.

When the inlay is to be completed at one sitting, burnishing the matrix is the quickest; but when the dentist is busy at other work and wishes to have his leisure time for preparing the matrix and baking the inlay, an impression of the cavity can be taken and the matrix made by swaging. In burnishing a matrix, as well as swaging, there are many little points of importance in each step we take in forming the same. The standard thickness of platinum inlay foils is one-thousandth of an inch. In cutting the platinum for a matrix do not be too stingy, but cut large enough to allow plenty of lap, as it is not waste of material but waste of time to cut it too small. The platinum being very thin, needs considerable coaxing to get into the cavity without tearing. The safest plan to avoid trouble in tearing is to form the platinum into a cone small enough to touch the bottom of the cavity; then grasp in a ball plier a suitable sized piece of wet spunk and coax the platinum over the floor of the cavity, beginning in the center, working out and drawing the platinum down. In the meantime, if the cavity is large enough to permit it, use a second instrument with wet spunk to keep the platinum from rocking while burnishing against the walls of the cavity. When this is done, place a large piece of spunk or swager rubber into the half-formed matrix, holding it firmly; pass around the margin of the cavity with the ball pliers and spunk, pressing the platinum over the surface of the tooth from the center of the cavity. After this is done, take out the large piece of spunk or rubber and use Reeves' burnishers; first use one of the half-round ball instruments in the bottom of the cavity gently, hold the matrix with the second instrument to avoid rocking; then burnish the walls with another instrument for that purpose and finish the burnishing with the one to be used on the margin of the cavity. At this point fill the matrix with gum camphor, pressing it in very firmly until the cavity is filled

flush; then talcum the camphor and matrix to keep the tape from sticking to them. Then place the tape over the matrix and apply pressure with a suitable instrument on the camphor and burnish outward over the margin of the matrix, if there should be any. After this part is completed, burn out the camphor and anneal matrix in the oven. Then replace and reburnish the margins. Remove the matrix with a smooth, medium-sized nerve broach sharpened out and prepared for the purpose, or a small explorer, coaxing it out very carefully so that the form will not be marred. Another method is to use a chipblower to force air under the edges. A drop of water under the matrix will assist the blower in freeing it.

In taking up the swaging process, the impression may be taken of the cavity with Britton's yellow cement, or any other cement that will behave as it does. It is quick setting and has a good edge strength, giving a good outline of the cavity. It is mixed medium stiff and taken between the finger and thumb and kneaded, first placing the finger and thumb in the cement power to keep it from sticking, and when stiff enough not to stick to the cavity, shape it to fit the cavity so that you can see that it is being pressed into every part of it. Do not dry the cavity, but take away the surplus saliva. The damp cavity will insure the impression not sticking.

Impression of Cavities—For taking an impression of an approximal cavity, after pressing it to place with the fingers, use a very thin metal strip to finish, forcing the impression to place, and bend over the tooth and hold the strip with the left hand, and in case it is necessary, press the cement over the cutting edge of the tooth with an instrument of the fingers of the right hand. After the impression is hard enough to move without marring too easily, loosen it slightly to see that it does not stick, and press back to place snugly until it gets hard enough not to bend or break. If it is an impression of an incisor approximal cavity, and it overlaps the labial surface so that it can not be drawn, take a very sharp instrument and trim down enough to let it be removed without cutting into the impression of the cavity proper. When removed, examine it to see that it is a perfect impression of the cavity. After a few minutes the impression can be placed in a swager with warmed dentallac or compound to overlap enough to hold it in place. When hard, oil and dry, then powder with talcum or soapstone. Mix more cement stiff as when preparing

for the impression and press over the impression in the lower part of the swager. When hard enough, warm more compound and place over the counter die through the upper part of the swager previously placed into position. Press down firmly with the plunger before the compound hardens so that it will fit over the cement counter-die perfectly. Now we have the impression and reproduction of the cavity before us to work by. After the cement has hardened for half an hour it is usually hard enough to burnish and give the matrix its final swaging. In doing so it is the fault of a great many to hit the plunger too hard. A medium blow with a small-sized swaging hammer is hard enough to bring the die and counter-die together over the thin matrix and there will be less danger of fracturing the cement or compound. Soapstone should be used on the die and counter-die to keep the matrix from sticking and avoid trouble of tearing it in the effort to get it loosened. There is nothing that will take the place of cement for swaging an accurate matrix. Dentallac and modeling compound will change their form in swaging, even as a counter-die, so the matrix is liable to stick to the compound and can not be freed without spoiling it. Fusible metal, like a child when company is present, is never on its good behavior when you most want it to be. It shrinks when a little bit too hot, and fails to pour well when not quite so hot. It is hard to get just right when it is most needed. Some may learn to use it successfully, but most of us do not, when it comes to the exactness for a matrix in inlay work. A perfect die and counter-die of metal of a cavity would be an ideal swager. When we use cement for an impression it forms the die and another mix forms the counter-die. What can be better and more accurate, taking everything into consideration, for a matrix swager out of the mouth? The platinum can be treated in the reproduced cavity of cement the same as in the mouth if so desired, or held over the cement impression with a rubber swager while it is being well burnished around the same. Before the final swaging always anneal the matrix in the oven.

There is another idea that can be mentioned here that should not be lost sight of, and that is to take an impression of the cavity and follow with the impression, pressing as hard and firmly as allowable without breaking the impression or tooth. Where this process can be used, it is quick and exact, especially in the final swaging.

In obtaining a matrix, it does not pay to get nervous and im-

patient; by doing so we meet with many failures. It can not be hurried; we have to calm down and take our time to it. We had better consider time nothing rather than make an absolute failure of our inlay. It is time saved to be slow but sure. Success is gotten only by careful manipulation of the cavity, the matrix and the inlay. There is no soft snap money gotten in the dental profession. We must love our work to enjoy it, let it be ever so hard to do, but do it with your might, trying to do every new piece of work better than the last. Our professional reputation depends upon how we use our ability. A good reputation brings us better prices. A dentist worthy of his hire will never starve. We must not allow ourselves to go backward, but advance to a higher standard in the profession.

Perfection is obtained by continued effort over great difficulties. Good judgment and a keen sense of the right and wrong way to do a piece of work are the necessary qualifications of a dentist.

There is no kind of a filling perfection within itself when made by the best operators; it is only an effort toward perfection for the preservation of the teeth.

The nearest approach to the natural tooth, in shade, is in the inlay, and that is discernible; it can not fool the eye at close range. The outline is there, which is not seen at a distance of a few feet, and is hidden in proportion to the thinness and accuracy of the matrix.

We are not making natural teeth, but only restoring lost portions with a material that will match in shade and appearance as nearly as possible for us at present, and that is the porcelain inlay.

Shading the Inlay.—The matrix completed, we proceed to select the shades to go into the inlay to correspond with those in the natural tooth. It is better to make a trial inlay on an old piece of platinum, hurriedly shaped somewhat like the matrix we are about to work on, to give us an idea as to the proper shades to combine to bring out the results desired. With the formula before us for this particular inlay, we can proceed with some confidence in the success of our inlay as to shade, taking care to bake in the same way. When ready for the practical inlay, grasp the matrix in a lock plier. Mix the foundation body to a thick creamy consistency, place in the matrix with a carving instrument and jar down by rubbing the carving instrument over the corner of the plier, as in the act of filing, and proceed until the matrix is one-half or two-thirds full. Use a small piece of blotting paper

to absorb the moisture. Dry perfectly before placing into the oven to avoid porosity by gradually heating until dry and hot.

Before placing in the oven, place a pure gold cylinder by the matrix on the fire-clay slab and push to the back of the muffle; gradually turn to the current until the cherry-red begins to leave the oven, and before the gold melts turn next to the last step, and when the gold melts into a perfect ball count twenty seconds for a high biscuit for the high fusing-foundation body. But before the first baking it is deemed advisable to make a cross through the foundation with a thin, pointed instrument (being careful not to mark the matrix). This will overcome the danger of the first bake drawing the matrix out of shape. After the first baking has cooled, grasp in the pliers again and proceed with more foundation body to fill up the parts where the shrinkage took place; the second baking of foundation body is baked thirty seconds after the gold melts. This gives it a glaze. If only one baking of the foundation is made, it must be thirty seconds.

Baking.—Before I go further with the baking I will go back to the matrix again. Mr. Brewster has placed on the market a matrix lining which is white with a high glaze and fuses to a glaze in about forty seconds after pure gold melts. The degree of shrinkage is greater than in the foundation body and two bakings are necessary to cover the bottom of the matrix. Before baking it should be separated with a cross incision like the foundation body and refilled for the second baking, then baked as follows: First baking, thirty seconds after the pure gold melts. Second baking, forty seconds.

The lining should be thick enough to shut out the reflection of the matrix beneath it. This will be sufficient to keep the cement from absorbing the rays of light through the inlay. The object in the lining is to reflect the rays of light back through the inlay, as they are reflected back in the natural tooth. This is supposed to give the inlay a more life-like appearance. It does it to a very great extent, but I am not able to say to what extent.

Cement, as we all know, changes the appearance of our inlays to a disappointing degree, and I think the matrix lining will help us out a great many times.

When the lining is used in the inlay, usually but one baking of foundation body is needed; then we can proceed with the enamel body to finish the inlay with the shades according to the formula of the trial inlay. The enamel body is jarred down the same as the

foundation and carved to suit the contour of the case. In every baking of enamel, next to the last step on the surface should be used just before it is hot enough to melt the pure gold. With every baking except the last, the current should be shut off just before the gold melts into a perfect ball to give it a high biscuit fuse. At the last baking the gold should be allowed to form into a perfect ball and the current turned off just as quickly as that formation takes place, as four or five seconds beyond that point is liable to over-fuse the inlay, and spoil your intentions as to the shade and strength of the same.

The object, in not baking or fusing to a high biscuit until the last baking is to avoid over-fusing. It is better to under-fuse and bake again than to over-fuse and spoil the inlay. The shading of inlays to match the natural teeth in which they are to be placed is quite an art. In one case it will be indicated by baking different shades separately. Occasionally a shade will need modifying by mixing with another to get the desired shade. I have had inlays where I mixed two or three shades together to match a tooth in one baking. Where I find the shades too dark, I use Brewster's XX white enamel. It helps one out of many a color scrape.

After completing an inlay it always needs more or less trimming, which should be done from the outer edge toward the center with a fine stone or fine sandpaper disk until the feather edges are removed, which should be done very carefully.

Where the inlay is contoured too much, it should be fitted in the cavity and ground down to the proper contour.

How to Hold an Inlay to Grind.—Most inlays are troublesome to hold in the fingers to grind and polish. A convenient way to do this is to melt sticky wax on the end of a small pine stick, enough to imbed the inlay close to the feather edge while the wax is quite warm. Then cool by placing it into a cup of cold water and proceed to keep cool while polishing or it will come loose. While held in this position a very high polish can be gotten with a wooden polisher and pumice or an Arkansas stone. When the polishing is done, warm the inlay enough to get it off the stick, then gradually heat it up in a furnace until the wax burns off. After it is cooled, should it need etching, according to the judgment of the operator, place wax over the outer part where the acid is not to touch. Then apply by hydrofluoric acid with a toothpick. After leaving for fifteen or twenty seconds, place into an alkaline solution to neutralize the acid. Some use a diamond

disk and make a shallow groove in the inlay. Etching or grooving is not necessary in most inlays where the cavity is properly prepared with anchorage. ,

Before cementing the inlay the occlusion should be looked after, and in case the occluding tooth or teeth strike, the inlay or teeth should be ground so that they will not strike.

Before adjusting the inlay the cavity should be dried and wiped with cement liquid, also the inlay should be treated in the same way and the surplus liquid wiped off. This will produce a stronger adhesion of the parts when the inlay is cemented.

In mixing the cement care should be taken not to get it too thin or it will not get hard enough, but mix thick enough to allow the cement to have its full strength and yet give plenty of time to adjust the inlay. The cement should be mixed with a bone spatula to avoid discoloration.

In the past my experience has been that a light green or gray-yellow cement has suited most cases. White might have been better in some cases, but I can not prove it.

Inserting the Inlay.—Inlays should be inserted into the cavity with the fingers and pressed to place with a wooden or rubber instrument, as a metal instrument is liable to fracture or chip the inlay. When in place it should be held there with a wedge or the wooden instrument until the cement is hard enough to hold after releasing the inlay. One-half hour after cementing a large inlay I dismiss the patient, after removing the compresses; others, so soon as cement is stiff enough to break. Where the inlay has good anchorage and the patient is warned to be careful, there is not very much danger of displacing the inlay. One or two days after the inlay has been cemented in, I polish the surplus cement away.

"All is well that ends well." The process of inlay work has been touched upon only partially in this paper. There are many more points of interest that might have been brought out had time permitted my doing so.

Self-satisfaction is seldom granted those who desire to progress in knowledge and professional ability. We must continually work and study. Progress is a never-ending battle. So our work is never done to perfectly satisfy us; our standard is just a little higher and the march is continued toward the goal.—*Dental Summary.*

[Extract.]

THE USE AND ABUSE OF AMALGAM AS A FILLING MATERIAL.

BY FRANK L. PLATT, D. D. S.

The truly scientific operator will allow his choice of amalgam as a filling material to be influenced by the location of the cavity only in so far as this leads him to believe that the ultimate end of operative dentistry, tooth preservation, will be best observed by its use. Aside from the location of the cavity, however, other considerations will govern the well-trained operator in the use of amalgam.

He will use it in cavities in teeth subject to decay, where other materials have repeatedly failed, or whose use is prohibited by the service demanded in each particular instance.

He will use it to repair the partial failure of other materials at the cervical border of the cavity, as a preventive of decay or "guard" in the area of greatest vulnerability in connection with other materials, or as a foundation upon which a superstructure of some other material may be safely placed.

In selecting an alloy from which amalgam is to be made several things are to be taken into consideration.

The tendency of the makers of amalgam alloys at present seems to be toward the production of a material which will make a tight filling which will bear the stress of mastication and will not discolor.

To this end we have upon the market today many alloys, each proclaimed by its manufacturer to be the best.

A careful analysis has revealed the fact that the formulas of many of them are practically identical, and experience demonstrates that not one of them is best for every case where amalgam is indicated.

An amalgam which is a good color keeper, which sets with reasonable promptness, which does not shrink, which has good edge strength, is to be selected for use in all ordinary cases, in mouths kept reasonably clean, where decay is only average in extent and quantity, and the teeth are average in structure.

In such cases a tight, strong filling which will not discolor will probably do the best service, but in mouths where decay is ram-

pant, where the tooth brush properly used is a stranger, where every filling material fails with alarming promptness and the teeth are below average in structure, such an alloy is most decidedly not indicated.

Amalgam has a prophylactic quality which must not be overlooked, and which seems to decrease in proportion as the material is made inert and unchangeable under oral conditions.

In that class of cases just mentioned, the best service will be rendered, if amalgam is used, by one which discolours, which even does not make a tight filling, and which stains the teeth black.

Such an amalgam is best for repairs where decay is rapid at the cervical border of other fillings, best for guard fillings and best wherever conditions are seemingly the worst.

Such amalgams contain copper and in this class is "coin amalgam," one of the earliest used, silver nine parts, copper one part; ordinary silver coin cut into fillings. A simple formula, if you please, but one which has a record as a tooth-saver second to none.

Having selected the indicated alloy, the next step is to convert it into an amalgam. For this purpose the proportions of alloy and mercury must be selected by weight in order to produce always a mass which "will permit of perfect adaptation of filling the cavity wall by tapping with light blows," as guess work produces only variable and indifferent results.

They are then placed in a glass of wedgewood mortar and thoroughly amalgamated.

If the alloy is refractory and does not readily unite with the mercury, the mass should be removed to the palm of the hand, wiped clean and dry, and carefully kneaded by the fingers into a plastic state; then returned to the mortar and thoroughly triturated into a homogeneous mass free from all granular feeling when rubbed between the fingers. The amalgam should then be divided into two or three parts, the first to be used just as it comes from the mortar, this to be followed by pieces from which the excess of mercury has been pressed by squeezing it through chamois skin with heavy, smooth-nosed wafering pliers.

Amalgam so selected and made, introduced into cavities of decay properly prepared, with smooth, well-defined margins, with proper attention paid to the retentive shape of the cavity, with frail walls

lined with cement for the double purpose of increased stability and prevention of discoloration, with pulp properly protected, perhaps additional anchorage being obtained by placing the first pieces of amalgam into the cement lining while it is still plastic and adhesive, and manipulated throughout with protection from moisture, with clean, smooth instruments, with all the care indicated for its use which the careful operator devotes to gold, and finally smoothed and polished will produce results gratifying to both patient and operator.

Now a few words as to the abuse of this long-suffering filling material. Your essayist was once asked at the meeting of a dental society what he considered the chief cause of the failure of amalgam fillings, and at once replied "One dollar and a half," and his opinion is still unchanged, and it is right here that the abuse of amalgam originates, a cheap material, used cheaply, by a cheap operator, for a cheap patient. The dentist who selects his amalgam alloy on account of its low price, without regard to its formula or knowledge of its faults or virtues excepting as they are stated in the circular wrapped around the bottle, is abusing the material, himself and the confidence of his patients.

Such an operator is likely to mix his amalgam in the palm of his hand or by shaking it in a bottle, paying no heed to the proper proportions of alloy and mercury; he is likely to pack this quickly-made, poorly-amalgamated mixture into illy prepared, partially excavated cavities filled with blood and saliva, to disregard the excess of material packed into the gingival portion of the approximal space, to consider the use of a properly adjusted matrix as wholly unnecessary, to finish the filling by wiping it off with a piece of absorbent cotton, and, finally, to charge the patient a dollar or a dollar and a half for a filling not worth half a cent.

It is in such ways as this that amalgam is abused by the cheap operator. It is also abused by a better class of operators who use but one kind of amalgam for every cavity, who do not know or at least do not practice the most vital principles governing the proper selection of this most excellent filling material, and to whom wafering, burnishing and final polishing are of little importance.

They may prepare their cavities fairly well and leave the margins of their fillings reasonably smooth and yet are not getting the best results which their amalgam is capable of producing, or rendering their best services to their patients.

The vast majority of amalgam fillings are placed in improperly prepared, unlined cavities; do not misunderstand me, all cavities should not be lined, and are very seldom perfectly finished.

The same dentist who is scrupulously careful in the use of gold as a filling material, whose cavity preparation is excellent, who condenses his fillings thoroughly, and finishes them artistically, is often careless in the use of amalgam.

Such cases bring us directly back to the original dollar and a half proposition, one of the many foolish precedents of our profession. Patients know that amalgam is cheap; fortunately few of them know just how cheap, and have been taught by dentists for generations to look upon the use of amalgam as something for which but a small fee should be charged.

Dentists cater to this belief and abuse a valuable material, for they feel they can not command a sufficient fee for this work to allow them to take time enough to do it well.

These abuses will end only when dentists have the courage of their convictions, when they cease to let the cost of material enter into the proposition at all, and teach their patients that a just fee is one based on the value of the service rendered and the time consumed, rather than on the cost of the material employed, its name, its color, or its constituents.—*The Pacific Dental Gazette*.

(EXTRACT.)

READILY MADE MATRICES AND THEIR APPLICATION.

BY H. W. ARTHUR, D. D.S., PITTSBURG, PA.

By a readily-made matrix we mean one that can be made for each case in hand, if need be, and especially for those cases where the ordinary appliances do not meet the requirements. The time employed in making a matrix will be more than compensated for by the time saved in filling.

In advocating the readily-made matrix we would not underestimate other appliances of this kind at hand.

The use of a matrix is to reduce a cavity having two or more orifices to one, and to furnish a mold for forming the filling material. The nearer we can approach exactness in introducing the filling material, especially at those points made obscure when the introduction of the filling is completed, the more sure are we of good results. For convenience in describing the forms of this appliance they may be classed under the following heads: The strip, the band, which includes the loop, and the single and the double slip matrix.

The strip is applicable to the anterior teeth. It is applied from a fixed point by slipping it between the teeth from labial to lingual, covering several teeth, and is brought close to the margins of the cavity by the use of a burnisher. To give rigidity where it is needed, after the first adaptation the strip may be removed and hard solder flowed on the back of it. This can be done and the strip replaced, as shown on the model (exhibiting) where the lingual wall of a lower lateral is supplied. The case exemplified could not be approached from the lingual side. With the strip matrix the lingual or labial wall may be supplied, and a mesial or distal wall also if need be.

The band matrix is a strip passing around a tooth, drawn close with pliers and soldered, as suggested by Dr. Herbst. It is especially valuable for plastic fillings. If properly fitted, where exact contour and approximal contact is desirable, it may be left in place until a subsequent sitting.

Read before the Pennsylvania State Dental Society at its annual meeting, Philadelphia, June 27, 1905.

Where there is a cavity on the distal surface of a bicuspid or molar and an open space between the teeth, the band is especially applicable when the filling material is gold. Passing as it does around the tooth, it gives all the resistance needed, except at the cervical margin, and there it may be supplemented by the use of impression compound braced against a distant tooth. The compound, while it is soft, can be shaped with the burnisher to the contour of the tooth inside the band and cavity.

The slip matrix, if we take into consideration the class of cavities to which it is applied—approximal cavities on the bicuspid and molars—stands first in the order of importance.

The ready-made slip matrix is made of sheet metal, No. 33 gauge preferable; this thickness has sufficient rigidity and will spring into place around the embrasure when properly shaped. With the addition of curved plate shears, contouring pliers, plate punch, and a half-round file or a carborundum wheel, a matrix of this class can be formed in a few minutes to suit any case.

Take a piece of sheet steel of the required length and width, shape it to avoid impinging on the gum, buccal and lingual, which can be tested as the shaping proceeds, extend it beyond the cervical margin of the cavity and around the embrasure to the buccal and lingual surfaces of the tooth; at the occlusal margin of the matrix a portion should extend, forming a lip when bent down. We would call attention to this lip as an especially important feature; it is intended to rest on the mesial or distal ridge, as the case may be, of the approximal tooth. It helps to fix the matrix in place, prevents forcing the matrix on to the gum, and presents a rounded edge, which can be more readily filled to. Another feature, of minor importance, is a hole punched in the buccal and lingual extensions to aid in the removal of the matrix.

The double slip matrix is a duplicate form of the single slip, connected at the occlusal edge and bent entirely over, one on the other. The double slip matrix may be used where two cavities in different teeth approximate the same space. It is employed in order to avoid the necessity for shifting the single matrix when the introduction of the filling material in one cavity is completed.

The single slip matrix should be applied by slipping it between the teeth beyond the cervical margin of the cavity, around the embrasures of the buccal and lingual surfaces, the lip at the occlusal margin resting on

the ridge, mesial or distal, as the case may be, of the approximal tooth, the cervical third closely wedged. By this method of application the matrix is stayed at four points—the buccal and lingual side extensions, the ridge lip, and the cervical portion, where it is wedged.

With the flexible slip matrix there may be slight yielding at all points, or there may be some fixed portions and others yielding; the operator may select which method of adaptation is best for the case in hand.

We are decidedly of the opinion that with few exceptions the slip matrix should be wedged to the exact margin at the cervical third of the cavity. The mechanical wedge may serve the purpose in many cases, but the wooden wedge, shaped to fit the inter-proximal space, beveled so that it will not injure the gum or tear the rubber dam, moistened with sandarac and forced well into place, meets fully the requirements.

The matrix should yield at the middle third, and more so as the occlusal third is approached.

The cervical third of the filling should be as near as possible completed with the condensing of the filling material, so much so that approximal trimmers and a narrow, thin strip, fine grit, would complete the operation at that margin.

The buccal and lingual margins are more readily approached for finishing; the yielding of the matrix will allow slight overlapping of these margins of the cavity with filling material and sufficient yielding of the matrix to give the proper contour. All space necessary for contouring and knuckling at the point of the approximal contact can be gained in this way.

With the readily-made matrix in mind and applied, many emergencies can be met and results insured which could not otherwise be attained; as an instance, a cavity on the approximal surface of a molar extending well up to the process. The rubber dam and ligature can not be made to clear the cervical margin of the cavity. A matrix can be fitted so that it will extend beyond the cervical margin of the cavity and not impinge on the gum, buccal or lingual. In placing a matrix of this kind, the rubber dam, being on the tooth, but not clearing the cervical margin, if forced back; if caught by the matrix and overlapping the cervical margin of the cavity, after wedging the matrix close at this margin the overlapping rubber dam can be dissolved away with chloroform.—*Cosmos*.

MISCELLANEOUS

COLD SOLDERING.

Dr. Beebee also said that fresh amalgam could be made to stick to an old amalgam filling by merely coating the freshly exposed surface of the latter with hydrochloric acid.

TREATMENT OF VERY SORE TEETH.

I have had great help from the use of a string tied around the tooth, instructing the patient to draw on it until it is real tight. The effect will be a revelation.—*F. Milton Smith, International Dental Journal.*

LAC EDGE OF INLAY.

In inlay work paint the peripheral edges of the matrix with shellac before placing the body. The shellac will burn out and prevent warping of the inlay. The crevice is filled at the second placing of body.—*Western D. Jour.*

ORAL HYGIENE.

As an especially effective wash to decrease the ravages of caries, mercuric chlorid in the strength of one to twenty-five hundred forms a valuable constituent of the prophylactic dentist's armamentarium. In many months it will not be indicated, but in those months passing through the stage of extreme susceptibility it will be prescribed.—*Geo. E. Hunt, Dental Digest.*

DR. L. P. HASKELL HONORED.

The Chicago Odontographic Society gave a banquet in honor of Dr. L. P. Haskell May 15th, the occasion being the doctor's 80th birthday. Dr. Haskell has been in continuous practice in Chicago since 1857.

The dinner was given in the banquet room of the Sherman House. The program consisted of a literary treat, entitled "The Larger Vision," by Dr. C. N. Johnson, and responses to toasts by the guest of the evening, Dr. L. P. Haskell, and by Drs. G. V. Black, J. E. Nyman, J. P. Buckley and others, interspersed with several excellent musical and entertainment features and concluding with the introduction of officers for the coming year.

CARE OF TOOTH BRUSH.

The tooth brush may be kept sterile by taking a large size test tube and constructing it about one inch from the bottom, providing it with a rubber cork as a stopper and placing a little formalin tablet or formaldehyde in the lower chamber and the brush in the upper chamber. It will then become sterile without injury to the brush.—*Dr. T. H. Hardgrove, Review.*

OUTLINE OF PLATE.

All plates should be worn as high as possible all around, but always higher over the cuspid teeth than elsewhere. To know where to locate the high points, use a pair of compasses and measure the teeth which you are to use, from the median line to center of cuspid, transfer the measurement to the die and from that to the plate and trim accordingly, dropping suddenly back of the high point to give free play to the muscles.—*Dr. L. P. Haskell, Den. Magazine.*

DEAN BANZHOF HONORED.

Commending and congratulating Dr. Henry L. Banzhof, vice-president and dean of the dental department of Milwaukee Medical College, for his successful efforts to secure recognition of the institution at the hands of the State Board of Dental Examiners, the alumni association of the college has adopted resolutions which will be engrossed and presented to him. The resolutions say that Dr. Banzhof's zeal and sense of honor has endeared himself to the profession at large, and that his fight for recognition has marked an epoch in dental

EDITOR PATTERSON'S RESIGNATION.

We are sorry to note that Dr. J. B. Patterson, formerly editor of the *Western Dental Journal*, through some misunderstanding with the publishers, was asked to resign the editorship of the aforesaid journal.

We are sorry to lose Dr. Patterson from the editorial field. Dr. Patterson has served a useful place in the dental profession as an editorial writer and has always stood for the highest and best in dental literature. It is with deep regret we see his name taken from the editorial papers of *The Western Dental Journal*.

RELIEF FUND.

THE AMERICAN DENTAL JOURNAL.

GENTLEMEN: Under the heading of the "Scrap Pile" I desire to make a suggestion regarding the fund for San Francisco sufferers. From my experience during the past few weeks, the task of acquiring a sum sufficiently large to materially assist those in need is a difficult one, and the "Scrap Pile" idea evolved from the ease with which a goodly sum was collected in Kansas City a year ago for an event of minor importance, by simply requesting all asked to donate a portion of their gold scraps, several hundred pennyweight soon accumulated.

Now, let every dentist, regardless of the fact whether or no he has paid into other funds, box up a portion of his gold scraps and send them to any dental journal, or to Dr. J. D. Patterson, of Kansas City, Mo., Keith & Perry building, treasurer of the National Relief Committee, and further assist those in distress.

Yours,
J. P. Root.

COMMENCEMENT AT INDIANAPOLIS.

Graduating exercises of the Indiana Dental College were held May 7th. Dr. George Edwin Hunt, dean of the faculty of the college, gave the class address, speaking on "Success in Life." Dr. Hunt urged the graduates not to center all their hopes in the accumulation of wealth, neither to become so absorbed in their profession as to be blind to all else, but to strike a happy medium that will make them broad-minded men of affairs.

He encouraged them to keep on their study, just begun in college, and to keep abreast not only with the affairs of their own professional world, but also to cultivate friends, read much and observe. He urged them to take an active part in the organization in the communities where they live, social, commercial and political, but all the while to be dentists first and take part in other things only for the broadening effect they produce. The diplomas were presented by Dr. J. N. Hurty, president of the college and secretary of the State Board of Health.

The graduates are as follows: Miss Agnes Miller, W. C. Ballou, Will Barnfield, W. L. Clark, C. O. Clemmer, H. D. Cofield, Chester Ferguson, A. T. Funkhouser, F. L. Gravis, Charles Green, H. A. Kelsey, H. B. Ketcham, J. D. Kirkpatrick, Harry Lamb, John Lavengood, J. H. McClain, H. W. Marxmiller, Howard Raper, Alex Ross, Charles Taggart and C. W. Witter.

AN APPEAL FROM FRISCO.

BROTHERS COOK, TULLER AND OTHERS—As secretary of the Dentists' Relief Committee, I have been counseled to suggest that dental engines, in whole or in part, second-hand hand-pieces, clamps, separators, forceps, vulvanizers and such instruments less common, excavators, etc., would give heart to many dentists depressed by loss and discouraged by the sight of 524 city blocks of burned territory. *We are grateful for help and sympathy tendered.*

Hopefully and ever yours,

L. VAN ARDEN.

AT THE DENTIST'S.

I.

Scene—A dentist's office, and the patient, seated there,
Had such a maddening toothache that he fairly squirmed in chair.
"Oh, Doctor! come to my relief, for something must be done."
"Just wait awhile," said Dr. B., "I'll fix it up, my son."

II.

And with the word he took a knitting needle, slightly bent,
And rammed it up that poor, sore tooth to try and find the dent.
"Oh, murder!" howled the tortured one. "What's that you're going to do?"
"You'll find that out," growled Dr. B. "You'll know before I'm through."

III.

And then he took a spinning-wheel and worked it with his foot.
To this he fixed an instrument, which in the tooth he put.
That dentist's wheel ground slowly, but it ground exceedingly well.
I'm sure of that, for I was there and heard the patient yell.

IV.

This was not all. Said Dr. B.: "I guess I'll have your nerve."
And then he took a treacherous-looking wire with a curve.
He jerked it here and dug it there; it almost made me ill;
And the groans of that poor fellow there gave everyone a chill.

V.

"All over!" then the dentist cried. "The next one may come now."
It was my turn, and then I said, and walked out with a bow:
"I just came here with Brother Jim"; but let me tell you this:
I haven't seen a dentist's chair from that day up to this. N. F. C.

PERSONAL AND GENERAL

Dr. Bell, a dentist at Yoakum, Texas, suffered a loss by fire of \$500, with no insurance, May 9.

Dean Resigns.—Dr. O. C. Metzler has resigned as dean of Creighton, College of Dentistry at Omaha, Neb.

Dr. Olin Lyman, a dentist at Pittston, Pa., died at the home of his parents in Scranton, April 25. He was 31 years old.

Hiatt-Shepard.—Dr. G. C. Hiatt, a dentist at Oakland, Ill., and Miss Kate Shepard, of Hume, Ill., were married April 29.

Dr. Hilary Lofton, a dentist at St. Francisville, La., was found dead in bed May 1. He died from heart disease. Deceased was a bachelor.

Dr. John A. Chapple, a dentist at Atlanta, Georgia, dropped dead of heart disease while seated at a table in a restaurant. He was 52 years old.

New Dental School.—Application for charter for Atlanta Post-Graduate Dental School has been made by W. S. and J. R. Conway. Capital stock \$5,000.

Icerman-Grafftey.—Dr. Louis F. Icerman, of Muncie, Ind., and Miss Leota E. Grafftey, of Indianapolis, Ind., were married at the latter place April 25.

For Charity.—The Millon, Pa., Dental Society have set apart Friday of each week to work for the poor, devoting the entire day to the work. Other societies please copy.

Dr. Robert E. Handley, a dentist at Fremont, Neb., died May 9 as the result of an operation. He was 26 years old, and a graduate of Chicago College of Dental Surgery, '05.

Hiatt-Mulholland.—Dr. Will N. Hiatt, of Malvern, Iowa, and Miss Myrtle Mulholland were married September last, but cards of announcement were overlooked until April 15.

Harry Conners, a dentist of Atlanta, Ga., was shot and fatally wounded May 8 at Evansville, Wis., by the discharge of a pistol that fell from his hip pocket as he was preparing to take a bath.

Dr. Silas Newman, a dentist at Fort Worth, Texas, died in Macon, Ga., May 1. Deceased had been in dental supply business in Texas, but had practiced dentistry for twenty-five years previously.

Dr. J. D. Burdick, of Detroit, Mich., died May 1 after an illness of six weeks of paralysis. Dr. Burdick had practiced in Quincy, Mich., and at other places. Recently he had been a dental salesman.

Dr. George H. Thompson, a dentist at Honeoye Falls, N. Y., died April 22 of heart disease. He was 37, and was a graduate of Pennsylvania Dental College, '95. Deceased leaves a wife and one daughter.

Grant County Society held a meeting in Marion, Ind., April 10th. Drs. J. Q. Bryam and W. E. Kennedy, of Indianapolis, gave talks and demonstrations. Dr. Bryam discussed porcelain and Dr. Kennedy talked on somnoforme.

The McLean County Dental Society held its regular meeting at the Illinois April 9th. There was a good attendance and papers were given by Dr. O. J. Jarrett and Dr. P. A. Pryer, of Pontiac. It was decided to hold no regular meeting in May on account of the State meeting at Springfield, May 8-11.

Henry-Stark County Society held a very successful meeting in Kewanee, April 4. Clinics were given by Dr. P. A. Helmer on porcelain filling, Dr. Greenhow in somnoforme, and Dr. Swain in nitrous-oxide gas. Papers were read by Dr. H. C. McMullen, of Cambridge; Dr. D. M. Lovering, of Buda, and by J. C. Warnock, of Kewanee on orthodontia.

Morgan County Society met at Jacksonville, Ill., April 5th. Papers were read by Drs. F. W. Noyes, C. W. Thompson and Arthur D. Black, all of Chicago, and clinics were given by the same gentlemen and by Robert Brewster, also of Chicago. Resolutions of respect and esteem for Dr. Harry R. Dunham were adopted.

The Southern Minnesota Dental Society met at Mankato in annual session April 12-13. Clinics were given by Drs. J. L. Kelly, of St. Paul; J. G. Hilderbrand, of Waterloo, Iowa; J. N. Pike, of Minneapolis; F. E. Cobb, of Minneapolis; J. B. Kremer, same city. President E. H. Argetsinger, of Pipestone, delivered the annual address and J. O. Wells, of Minneapolis, gave a practical talk on porcelain.

Washington University's First Graduate.—Dr. A. W. French, a dentist who lived and practiced his profession in Springfield, Ill., when Abraham Lincoln was a comparatively obscure lawyer there, addressed the annual meeting of the Alumni Association of the Dental Department of Washington University May 23. Dr. French was the first graduate of Washington University's dental department. He began practicing in Springfield in 1848, before the days of dental schools. On the establishment of Washington University dental department he entered and was graduated in 1867. His address included many personal reminiscences of the early days of dental practice in the West.

Central Texas Dental Society.—The Central Texas Dental Society met at Temple April 16th with a good attendance present. Papers were read by Dr. Berringer of West and Dr. J. M. Murphy of Temple, while a number of subjects of interest to the profession were thoroughly dis-

cussed. Officers for the ensuing year were elected as follows: Dr. Frank Foreman, Waco, president; Dr. E. P. Gould, Temple, vice-president; Dr. J. M. Murphy, Temple, secretary and treasurer.

Kansas Wants New Dental Law.—The dentists of Kansas at their annual meeting decided to ask the legislature to pass a bill making more rigid requirements for dental practice. Dr. G. F. Ambrose, president of the association, was instructed to appoint a committee of seven to draw up a bill to be submitted to the legislature. This committee will report at a called meeting of the Kansas State Dental Association next fall.

Dental Fraud Punished.—Philip H. Senior and Fred W. Herr pleaded April 4, guilty of conspiracy to deceive the State Dental Board in an examination for certificate. They were each fined \$150 and costs of court.

Herr passed the examination by the State Board last May, but Senior failed. In December Herr, for a consideration of \$300, impersonated Senior in an examination and passed. But the deception was speedily detected by Dr. Harry McFadden, chairman of the State Board, who had the men arrested.

Proposes on Denture.—On the plate of a false set of teeth which he had made for a well to do widow a Lancashire dentist inscribed a proposal of marriage. Unfortunately for his hopes the object of his affection did not fall in with his eccentric humor. She considered herself grossly insulted, and was barely appeased by her wooer's tendering a most ample apology. The dentist, however, was determined to win her, and after three proposals he was accepted. The marriage is to occur next week.—Chicago Inter-Ocean.

Paid His Fare in Teeth.—"An extremely absent-minded patient of mine told me a funny story regarding the first time he ever wore a set of upper false teeth I had made for him," said a Boston dentist to a friend. "He was riding down-town in an electric car in which every seat was taken, so that there were many to witness his mortification. He was so entirely absorbed in a book he was reading that he was oblivious to his surroundings, and when some small irritating particle made its presence felt under the plate of his teeth he simply removed the teeth and went on reading with the plate held in full view between his thumb and finger. He had taken a nickel from his pocket for his fare before sitting down, to have it in readiness for the conductor, and he had the nickel in the same hand in which he was holding up his teeth. With his eyes still fixed on his book, he sought to drop the teeth into the hand of the conductor when the latter came down the aisle with the usual cry of 'Fare, fare!' Not until the grinning conductor had said, 'I don't want your teeth!' did he discover the appalling absurdity of his situation. Then he dropped the plate into his pocket and decided that the air was better out on the front platform."

Alleged Robber of Dentists Arrested.—In the arrest of John K. MacKay at Washington, D. C., the alleged burglar-actor, the police claim a much-wanted thief has been captured and one of the best arrests of the year has been made. The police say that besides being wanted in Trenton, N. J., for entering dentists' offices and stealing gold, he has been identified as the man who bulglarized offices in Cleveland, Ohio, and stole \$200 worth of gold during the week of February 12, 1906.

Ontario Dentists' Banquet.—The annual banquet of the Ontario Dental Society was held March 14 at Toronto, upward of one hundred members of the society being present.

Dr. C. A. Kennedy presided and introduced the toast list. "Canada and the Empire" was proposed by Dr. G. S. Caesar, of Toronto, and replied to by Dr. J. P. Downey, M. P. P. Dr. Moyer, of Galt, proposed "The R. C. D. S.," to which Dr. Thornton, of Chatham, spoke in reply. "Our Guests" was introduced by Dr. W. T. Hackett. Dr. Peeso, of Philadelphia and Dr. Burkhardt, of Buffalo, responded.

A Suspicious Scot.—A Scotsman the other day went to a London dentist with a toothache. The dentist told him he would only get relief by having it out.

Scot—Mon, then I must hae gas.

While the dentist was getting it ready, the Scot began to count his money. The dentist said, somewhat testily: "You need not pay until it's out."

The Scot replied: "I ken that; but as ye're aboot to mak' me unconscious, I just want to see hoo I stan'."

A Rare Book.—Dear Editor: I saw in a recent copy a notice of someone having an old book on dentistry. I have a copy of "Goddard on the Teeth, with Thirty Plates," printed in 1844 by Carey & Heart. (I should say part is covered with paper, first part of book having been used for scrap book.) Printed for G. —. Loomis ??? ??? letter covered. It treats the subject from the history of the teeth through all branches of dentistry. Contains 227 pages, 10x12. The plates are particularly fine. —Yours, J. A. Robinson, Morrisville, Vt.

Robberies.—The following, with losses, have been reported during May. Drs. Von Berg & Petry, Charles City, Iowa, loss \$50; C. L. Eller, Hedrick, Iowa, loss \$120; Murlless & Beebe, Sidney, Neb., loss \$100; F. E. Gaston, Tyler, Texas, loss \$60; O. A. Dean, Oakland, Cal., loss \$65; A. Van Horne, Pekin, Ill., loss \$50; Dr. Terry, \$40 cash and gold; Drs. Tanner and Comegrys, \$25 each; Dr. Wallick, \$50, all of above at Shreveport, La. Dr. T. W. Morgan, \$250, at Sharon, Pa. A. F. Gordon, \$50, at Lansing, Mich. Dr. H. A. Shannon, \$25, at Lincoln, Neb. Dr. Ford Hayes, loss considerable, at Butler, Pa. Dr. G. B. Abernathy, loss \$190; at Ardmore, I. T. Dow Dental Depot, Portland, Maine, loss \$400. Dr. E. E. Sulsberger, loss considerable, at Bellaire, Ohio. Dr. Pendleton, of Normal, Okla., heavy loss.

Killed by Elevator.—Frank Parkhurst, a dealer in dental supplies, was crushed to death between the elevator and the wall of the shaft in the Reliance building, 100 State street, Chicago, May 12. He was about to board the elevator at the seventh floor. The inquest developed the fact that the door, which is automatic, closed with Parkhurst only partly through, being held in that position and crushed by the descending car.

STOP THIEF.—Dr. L. A. Knapp, Chenoa, Ill., writes as follows: "My office was burglarized last Monday, May 21st, and gold and bridges taken to the amount of \$15 or \$20. Am quite positive it was done by a Collier's Weekly representative while I was out of the office for a few minutes. He registered at the hotel here as George Bent. This is no doubt the same man who has been victimizing dentists throughout the country and who has been reported to the American by different victims. Look out for this man. He has cleft palate and wears an obdurator; is about five feet seven or eight inches, weighs 150 pounds, smooth face, 30 or 35 years of age, hair streaked with gray.

New York State Dental Society.—At the session of the Dental Society of the State of New York \$700 was raised for the relief of the San Francisco sufferers. The award of gold medals, from the fund donated by Dr. William Jarvie last year, to be awarded to men who have made meritorious scientific research during the year of value to dentistry was made. Three medals were awarded and the following were the men honored: Dr. G. V. Black, of Chicago, Dr. E. T. Darby, of Philadelphia, and Dr. Miller, of Berlin, Germany, an American, sojourning there. The medals were of most beautiful design, almost square in shape and arranged to be worn as watchcharm or fob. Officers elected for the ensuing year are as follows: President, Dr. W. A. White, Phelps; vice-president, Dr. W. S. Rose, Schenectady; secretary, Dr. C. S. Butler, Buffalo; treasurer, Dr. C. W. Stainton, Buffalo; correspondent, Dr. S. L. Goldsmith, New York. The president-elect was empowered to appoint delegates to the National Dental Association.

REMOVALS.

Dr. F. E. Jones from Ridley Park to Chester, Pa.; Dr. J. D. Hill, Carthage to Kansas City, Mo.; Dr. A. Hein from Caro to Sebawaing, Mich.; Dr. Specht from Oshkosh to Fond du Lac, Wis.; Dr. Felix from Highland to New Baden, Ill.; Dr. W. E. Griswold from New York to Evanston, Ill.; Dr. J. E. White from Schenectady to New York City; Dr. L. P. Colburn from Grand Forks to Spokane, Wash.; Dr. P. J. Miller from Oklahoma City to Lyons, Kansas; Dr. E. M. Pierce from Rugby to Grand Forks, N. D.; Dr. M. Ryan from Clintonville to Coffeyville, Kansas; Dr. Waldron from Menominee to Eau Claire, Wis.; Dr. Pilkinton from Portland to Pewamo, Mich.; Dr. J. Duncan from Crawfordsville to Warsaw, Ind.; Dr. W. O. Weber from Nauvoo, Ill., to Oskaloosa, Iowa; Dr. J. H. V. Reese from Atglen to Wrightsville, Pa.; Dr. Reeves from Keokuk to Garden Grove, Iowa; Dr. Rowley from Niles, Mich., to Chicago; Dr. Cathers from Springfield to Urbana, Ill.; Dr. F. W. Wilcox from Menominee to Fish Creek, Mich.

Home of Chicago's First Dentist.—The homestead erected by Dr. J. Asa Kennicott at Forty-eighth street and Madison avenue in 1857 is to be torn down. When Dr. Kennicott, the first dentist to practice in Chicago, built his residence in Kenwood neither Madison avenue nor Forty-eighth street had been laid out. The road which passed before the place had been mapped out by the cows which daily were driven past by farm boys living in the vicinity, and the now fashionable neighborhood was a prairie. Dr. Kennicott decided to call his ten-acre farm Kenwood, because it was then so far away from the city that it was deemed necessary to have some distinctive name. It was the original Kenwood.

FOR SALE.

Office and practice in Illinois town of 2,500. Address "XY," AMERICAN DENTAL JOURNAL.

FOR SALE.

Office and practice, Chicago; ideal location; German settlement. \$350. Address "Future," care AMERICAN DENTAL JOURNAL.

FOR SALE.

Office in small town now paying \$2,500 per year. Price, \$200; reasonable terms to right party. Address A. J., AMERICAN DENTAL JOURNAL.

FOR SALE.

Dental practice and outfit. Returns average \$2,600 per annum. \$500 cash or time. Coalior, Western Kansas. Address Europe, American Dental Journal. A. E. WOODWORTH, Ellis, Kansas.

UP-TO-DATEDNESS

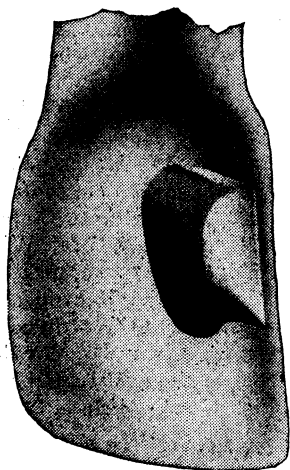
Generates Success

"Keep abreast the times" is what a wise man once said. He knew.

It is a well established fact with the profession that

Porcelain and Gold Inlays

must be considered essential to up-to-date dental work. My system is a recognized success. Full information absolutely free upon request. WRITE NOW. Don't wait until your competitors have established a reputation in this special work.



ARTHUR E. PECK, M. D., D. D. S., 403 Medical Block, MINNEAPOLIS, MINN.

INDEX TO ADVERTISEMENTS.

| | Page |
|---|--------------|
| Acestoria | 6 |
| Adams Mouth Prop..... | 28 |
| Amalgam Refined..... | 29 |
| American Cabinet Co., Two Rivers, Wis..... | 5 |
| Antidolar Mfg. Co., Springfield, N. Y..... | 9 |
| Antidolorin | 48 |
| Antikamnia Chemical Co., St. Louis..... | 14 |
| "Bargains"..... | 15, 16 |
| Borine..... | 88 |
| Brewster Dental Co., Chicago, Ill..... | 44 |
| Burke's Dental Specialty Co..... | 24 |
| Carpenter Mfg. Co., The, Boston, Mass..... | 38 |
| Caulk, The L. D. Co., Philadelphia, Pa..... | 21, 84 |
| Chicago College of Dental Surgery, Chicago, Ill..... | 84 |
| Chicago Dental Laboratory Co..... | 17 |
| Cleveland Dental Mfg. Co., Cleveland, O..... | 45 |
| Crocker, Samuel A. & Co..... | 80 |
| Croselmirre & Ackor Co., Newark, N. J..... | 28 |
| Dee, Thomas J. & Co., Chicago, Ill..... | 28 |
| Dentists Supply Co., New York..... | 47 to 57 |
| Detroit Dental Mfg. Co..... | 24 |
| Dioxogen..... | Second Cover |
| Dr. Davis' New Comb. Separator and Matrix, Moulton, La..... | 85 |
| Excel Chemical Co..... | 8 |
| Frink & Young—Sprake Cotton Roll Holder and Shield..... | 7, 8 |
| Goldsmith Bros., Chicago, Ill..... | 18 |
| Hall & Ruckel, Szodont..... | 00 |
| Hanson's Dam Holder..... | 38 |
| Hisey Alvatunder..... | 14 |
| Indiana Dental College, Indianapolis, Ind..... | 38 |
| Ivory's Specialties..... | 20 |
| Jennelle Chemical Co..... | 9 |
| Johnson & Johnson..... | 85 |
| Kress & Owen Co., New York..... | 00 |
| Lambert Pharmacal Co., St. Louis..... | 0000 |
| Lauderdale Crown System..... | 40 |
| Lavoris..... | 80 |
| Lee Smith & Son..... | 26 |
| Lennox Chemical Co..... | 0 |
| Louisville Dental Laboratory & Mfg. Co..... | 39 |
| Medico-Chirurgical College..... | 28 |
| Michigan Drug Co..... | 42 |
| Mounted Carborundum Points..... | 39 |
| Nolde Dental Mfg. Co., John T., St. Louis..... | 22 |
| O'Brien Worthen Co..... | 48 |
| Peck Correspondence School, Minneapolis, Minn..... | ... |
| Permaneo..... | 37 |
| Randall-Faichney Co..... | 25 |
| Repairs..... | 41 |
| Ritter Dental Mfg. Co..... | 10 |
| Sanitol Company..... | 1 |
| Sanitube..... | 26 |
| Somnoforme, E. de Trey & Sons, New York..... | 56, 57 |
| Spear-Marshall Co., Chicago..... | 4 |
| State Board Journal, Washington, D. C..... | 8* |
| Steere, Geo., Chicago..... | 14 |
| Sterlon White Alloy Co., Chicago, Ill..... | 27 |
| Tenax..... | 88 |
| Traun Rubber Co., New York..... | 19 |
| Turner Brass Works..... | 46 |
| Twentieth Century Teeth..... | 33, 47 to 55 |
| University of Illinois..... | 11, 12 |
| Ward Chemical Co., Alfred..... | 42 |
| Weber's Fountain Spittoons..... | 2 |
| Wedgelock Tooth Co..... | 26, 46 |
| Williams, J. A..... | 81 |
| Wilson's Anaesthetic..... | 18 |

YOUR BEAUTIFUL SANITOL GIRL

patient keeps her teeth white and clean by the daily use of your prescriptions of.....

Sanitol Tooth Powder

¶ It creates oxygen in the mouth when it comes in contact with the mouth juices, guaranteeing absolute cleanliness.

¶ It is as well antiseptic, thereby destroying all mouth impurities, aiding digestion and good temper.

Why not prescribe

SANITOL TOOTH POWDER

BEST FOR THE TEETH

Exclusively to your patients?

Sanitol Liquid Antiseptic — Powder — Paste — Brush

By mentioning the AMERICAN DENTAL JOURNAL when writing to Advertisers you will confer a favor upon both the Advertiser and the Journal.

RECEIVED LIBRARY.

APR 18 1907

